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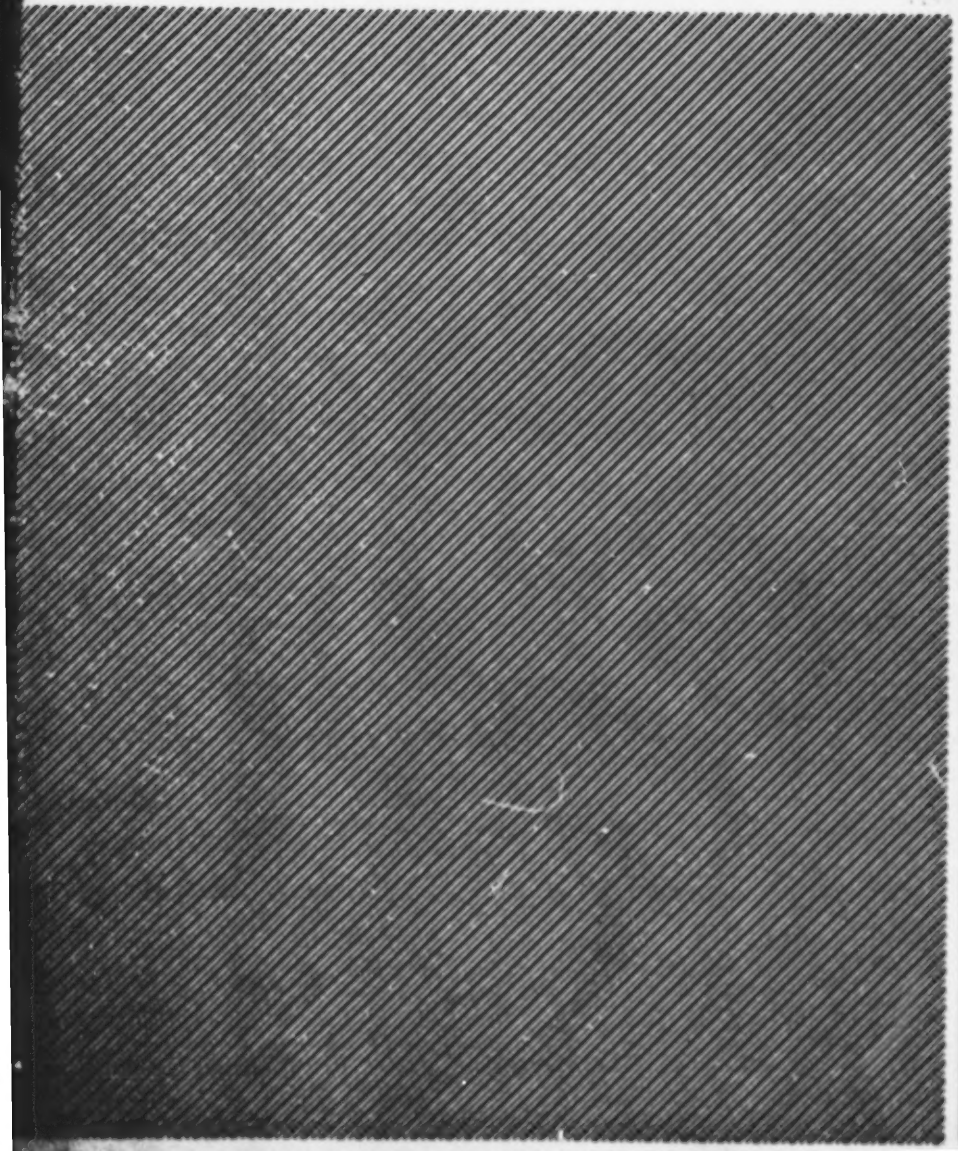
Province of British Columbia
Ministry of Energy, Mines and Petroleum Resources

Petroleum Resources Division

Annual

Summary of Operations

1983



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INTRODUCTION

This report is a compilation of information that details the activities of the Petroleum Resources Division and the petroleum industry during 1983. Its purpose is to provide persons interested in the British Columbia petroleum industry with the accomplishments by the industry and explain the role of the Division staff.

The report is divided into three sections (1) Petroleum Resources Division Organization, (2) Review of Industry Activities, and (3) Highlights of Division Activities. In addition, there is a series of tables and illustrations providing important information on the petroleum industry operations in 1983.

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DIVISION ORGANIZATION

The Petroleum Resources Division, under the general direction of a Assistant Deputy Minister, administers the *Petroleum and Natural Gas Act*, the *Geothermal Resources Act*, and the *Petroleum Underground Storage Act*. The Division enforces the regulations made under the three Acts which are the Drilling and Production Regulation, the Geophysical Regulation, the Drilling Licence Regulation, and the Development Road Regulation under the *Petroleum and Natural Gas Act*. Under the *Geothermal Resources Act*, the Division administers the Geothermal Drilling and Production Regulation as well as the Administrative Regulation. The Divison is responsible for all matters related to the disposition of Crown-owned rights as well as the regulation of the exploration, development, and production phases of the petroleum and geothermal industries.

The Division is made up of four Branches, namely, the Engineering and Operations Branch, the Geological Branch, the Titles Branch, and the Offshore Administration Branch.

ENGINEERING AND OPERATIONS BRANCH

The Engineering and Operations Branch, under a Director, is responsible for all engineeering and operational activities of the Petroleum Resources Division.

There are four main functions:

(1) Enforcement of the Drilling and Production Regulation under the *Petroleum and Natural Gas Act* and *Geothermal Resources Act* together with provisions of advice to the Minister with respect to applications made by industry under the Acts.

(2) Collection, filing for Division and public use, and publication of drilling and production statistics, production and disposition data, reservoir, and pool performance data.

(3) Reservoir analysis of all pools in the Province, including maintenance of current production rate forecasts together with data concerning reserves discovered to date and estimates of potential reserves growth.

(4) Providing advice to other government agencies on petroleum and geothermal industry matters.

The Development Engineering Section, under the supervision of the Senior Development Engineer, licences drilling and service rigs, issues well authorizations, and maintains detailed records pertaining to all drilling and production operations.

The Reservoir Engineering Section, under the Chief Reservoir Engineer is concerned with all reservoir engineering aspects of the Branch's activities. The Section is responsible for determination of reservoir and production characteristics of pools in the Province. This involves interpretation of reservoir pressure, rock and fluid properties,

and production data. These parameters are used to forecast ultimate recoveries obtainable from accumulations in the Province, and the rates at which these volumes will be produced. The Section sets oil and gas allowable rates and studies, promotes, and deals with industry recommendations concerning improved recovery schemes.

The District Office (Field Operations Section) located in Charlie Lake is under the Manager - Field Operations. The District organization consists of a field inspection group, a project and geophysical group, a core storage group, and secretarial staff. The District represents the Petroleum Resources Division in the field and is responsible for enforcement of regulations in drilling and production operations and liason with industry and other Ministries. It also collects reservoir and other data, carries out studies of operating procedures, and maintains core and drill sample storage and examination facilities.

GEOLOGICAL BRANCH

The Geological Branch consists of three sections under the general guidance of the Director of Geology. As an integral part of its function, the Branch is responsible for the compilation and assessment of geological and related information concerned with the exploration for and the development of petroleum and geothermal resources within the province; assisting in the framing of development procedures to ensure conservation and the best returns from these resources; estimating the undiscovered potential of the petroleum and geothermal resources base; and providing data and advice to attract and stimulate the private sector to undertake active exploration and development programs.

The Economic Geology Section under the supervision of the Senior Economic Geologist, is accountable for the provision and maintenance of a geological data base which will promote the efficient management of petroleum and natural gas resources. Regional evaluation work carried out on oil and gas productive horizons provide basic data used in assessing the remaining undiscovered potential. These data are also used in the evaluation of lands posted for the disposal of Crown petroleum and natural gas rights.

Reservoir Geology under the supervision of the Senior Reservoir Geologist, is primarily concerned with the detailed knowledge of the geology of oil and gas reservoirs. This knowledge possessed by geological staff is constantly made use of by the Division in the framing of development procedures to ensure conservation and the best returns from these reservoirs.

The Geophysical Section under the supervision of the Senior Geophysicist is responsible for geophysical matters related to the exploration for and the development of petroleum, and geothermal resources. Primary functions include the provision of interdisciplinary services to Geology and Titles in the assessment of information and material submitted in support of land tenure renewal and work requirements pursuant to the *Petroleum and Natural Gas Act*, and the *Geothermal Resources Act*.

TITLES BRANCH

The Titles Branch consists of three sections under the direction of the Commissioner. The Branch is responsible for administering those parts of the *Petroleum and Natural Gas Act*, the *Geothermal Resources Act*, the *Underground Storage Act* and all of the essential regulations relating to and affecting title to the Crown petroleum, natural gas and geothermal rights. In addition, the Branch administers the dispositon of these Crown rights which are held at various times during the year.

The Lease Administration Section, under the Manager, Land Administration, is responsible for the issuing of petroleum and natural gas permits, leases, drilling licences, etc. The Section is also responsible for recording transfers of title and encumbrances that are received and approved. In addition, geophysical licences, notice of commencement of exploratory work, affidavits of work and unit agreements are approved and processed.

The Revenue Section, under the Senior Accounting Clerk, is accountable for the collection of all fees and rental payable to the Crown under the provision of the various Acts for which the Branch is responsible. The Section also receives and accounts for security and performance deposits required under the Acts or regulations.

The Draughting Section, under the Senior Draughting Technician, is reponsible for preparing plats which are affixed to each title documents that is issued, and for updating, on a continuing basis, all of the various seismic road and trail maps, petroleum development road maps and other miscellaneous maps used by the Titles Branch in order to provide effective service to the public. This Section also provides draughting services to other Divisions of the Ministry.

The Titles Branch is responsible for the disposition of rights to explore for geothermal resources. This responsibility includes the administration of the pertinent sections of the Act and associated regulations that deal with obtaining and retention of geothermal permits and leases.

OFFSHORE ADMINISTRATION BRANCH

The Offshore Administration Branch develops British Columbia's policies on offshore oil and gas activites, and coordinates the preparation and planning in this Ministry and others in anticipation of the resumption of exploration on the British Columbia west coast. Although the Branch ceased to exist during the year, its functions are continued under the direction of the Assistant Deputy Minister, Petroleum Resources.

THE PETROLEUM INDUSTRY IN 1983

The downturn of petroleum industry activity in British Columbia which started in 1981 continued at an accelerated rate in 1983. This applied to all phases of the industry, and data for drilling, production, geophysical work and land acquisition are given under the respective headings of this Section.

Fiscal data for 1983 are as follows:

Value of Production

	$
Crude oil	402 075 945
Field condensate	3 411 136
Marketable natural gas	455 187 148
Gas plant liquids	38 677 155
Total	899 351 384

Provincial Revenue from the Petroleum Industry

Rentals and fees	40 258 727
Crown reserve dispositions	26 014 217
Oil royalties collected by Ministry	89 255 387
Gas royalties collected by B.C. Petroleum Corporation	102 580 000
Total	258 108 331

During 1983 activity continued to be adversely affected by economic factors especially the reduced export market for natural gas and industry's projection of inadequate return on drilling and production operations due to government pricing and taxation policies. Steps were taken by the government to improve this situation by approving many of the recommendations made by a Gas Marketing Study Group to improve the institutional and financial frameworks underlying the production and marketing of natural gas in the Province. However, it is recognized that the expansion of sales will be difficult to achieve in the short term.

DRILLING

Some recovery to the decline of drilling operations over the past three years was indicated in 1983. The annual statistics generally showed a decrease but towards year-end, activity was making significant gains based upon a shallow oil discovery made during the previous winter in the Desan area, northeast of Fort Nelson. This upturn was reflected in the land disposition results, the geophysical level of activity and the number of well authorizations issued during the latter part of 1983.

For the annual comparisons there were 76 locations and 131 134.2 metres drilled, a decrease of thirty percent relative to the 108 wells and 204 874.3 metres for 1982. Likewise there were 26 oil wells, 19 gas wells and 31 abandonments in 1983 against 26 oil, 41 gas, 39 abandonments and 3 wells that were assigned standing status for 1982. Towards the close of 1983, 64 well authorizations were issued during the months of October, November and December compared to 25 well authorizations for the same three months of 1982. This significant increase was the result of the Desan oil find. Although this play is not conclusively evaluated an exploration and development program will continue to prove the area's potential. If the results are positive, a decision will have to be made on the method and route of transporting the oil to the pipeline network.

The drilling activity carried out for geothermal resources in the Meager Creek area was not continued in 1983.

PRODUCTION

Oil production for 1983 increased slightly from 1982 to 2 078 771.3 m^3. At year end there were 657 producing oil wells, a gain of 24 since the end of 1982. The largest producing oil field was Boundary Lake at 720 849.2 m^3, followed by Eagle West 463 791.9 m^3, Inga 150 105.2 m^3 and Peejay 111 574.7 m^3. All these fields except Boundary Lake were reduced fromd the 1982 volumes.

The non-associated raw gas production was 7 388 360.0 10^3m^3 a slight decline from 1982. The Yoyo field was again the largest producer at 1 217 546.2 10^3m^3; then Sierra 1 133 892.0 10^3m^3; Clarke Lake 632 089.4 10^3m^3; and Laprise Creek 265 176.8 10^3m^3. The number of producing gas wells at year end was 616 compared to 591 wells at the close of 1982.

Three applications for concurrent production were approved on the condition that gas production be conserved. These were in Cecil Lake-North Pine 'A', North Pine 'B' and Stoddart-Belloy 'A' and 'B' pools. An application for concurrent production in Fort St John-North Pine 'C' pool was turned down since a Division study indicated that the requested pool area is part of a larger oil/gas cap accumulation which could be adversely affected by such an approval. One concurrent production approval in Boundary North-Halfway 'D' pool was rescinded since gas production could not be conserved economically. An application for concurrent production in Boundary Lake-Halfway 'A' pool was under review at year-end. Two applications for concurrent production and good engineering practice were approved in Cecil Lake North Pine 'A' and North Pine 'C' pools with the condition that gas production be conserved. One application for good engineering practice was approved in the North Grizzly Unit No. 2 Baldonnel 'A' gas pool. One good engineering practice approval was revised to reflect a new interpretation which coalesced the Milligan West Halfway 'B' pool with the gas cap of Weasel Halfway 'C' pool.

Four applications to flare solution gas on a temporary basis pending completion of conservation facilities were approved. These approvals were for individual wells in the Eagle West and Stoddart areas. One

application to convert a well to salt-water disposal service in the Siphon field was approved. An application to construct and operate a gas treating facility in the Grizzly Valley area to supply the town of Tumbler Ridge was reviewed and approved.

An application for new oil royalty rates for incremental oil production resulting from infill drilling in Peejay Halfway Unit No. 2 was approved. The new oil royalty rates will be applicable after 21 000 m^3 of royalty oil have been produced effective January 1, 1984.

FIELD ACTIVITY

The 1983 activity related to the petroleum industry was at a low level. Two major projects were commenced in the second half of 1983 and will be ongoing into 1984. These are commencement of an exploratory drilling program for carbon dioxide in the Flathead area and construction of a 300-man base camp in the Helmet area which will be required by Gulf Oil for an exploratory drilling program. Without these two projects, activity levels would have been below those of 1982.

No uncontrolled blow outs occurred during the year. Also there were no instances of drilling problems encountered that are worthy of mention. However during 1983 one of the most productive gas wells in the Province, Mobil Sierra a-98-K, had to be prematurely abandoned. This well had been under close surveillance by the District Office and Mobil Oil for some time. It was eventually confirmed that gas leakage was occurring from the well's production tubing into the surrounding casing annulus. Mobil Oil concluded that the exposure of the production casing to sour gas created a dangerous situation. It was also determined that, due to anticipated down-hole problems, it would be better economically to abandon the well and redrill a new location rather than to attempt repairs. During the abandonment operations, it was determined that numerous sections of the casing had failed due to internal corrosion. These sections were cement-squeezed and the well was abandoned up to the base of the surface casing. By agreement with the District Office the well head was reinstalled and the well will be monitored for pressure build up until summer 1984 before final abandonment.

During 1983 there were no major oil spills or environmental incidents. All spills that occurred were of a minor nature confined to the lease area and were readily cleaned up. Several fires occurred during the year at production facilities. A dehydrator fire at Canhunter et al S Julienne b-A82-L totally destroyed the unit, associated piping, and controls. It was determined that the source of the fire was a leak in the gasket on the sales line valve, downstream of the dehydrator. The cause may have been a flash back from the flame arrestor. A minor fire occurred at a Petro-Canada Peejay field gate battery. The fire was caused by a malfunction of the air compressor. The resulting loss of air supply then caused the treater dump valve to stick and oil flowed to the flare stack. Consequently, burning oil spilled over the stack and to an underground pollution tank. The transfer pump, underground storage tank and the flare stack were all damaged.

During March flaring of solution gas from both the Eagle and Cecil fields were necessiated due to excessive pressure in the Westcoast Transmission pipeline. This condition was attributed to faulty inlet scrubbers at the Taylor Gas Plant and resulted in 18 days down time.

A submission was made during July by Northland Utilities (B.C.) Limited for approval to construct and operate a gas treating facility to process raw gas from the Grizzly North field and supply natural gas to the new town of Tumbler Ridge. The District Office staff checked the design and operating sections of the pipeline and made several field inspections while construction was underway. Construction was finalized by year end and gas delivered to the distribution pipeline.

During the year the majority of the facilities in the Beaver River gas field were abandoned. This field had been considered to be a major gas field with a substantial gas purchase contract in place. However the producing capability of the field declined dramatically due to water influx into the reservoir. During the past ten years the field has remained in an active state producing only small quantities of gas. The seven field wells are abandoned, site reclamation work is completed and access roads have been reclaimed. This finalized Amoco Canada's commitment in the Beaver River field with the exception of the gas plant, pipeline, airstrip, and the access to the Liard River barge site.

EXPLORATION AND DEVELOPMENT

The slump in oil and gas exploration and drilling activity in British Columbia persisted through 1983 to the lowest level in 27 years. The reasons for this continuing decline are mainly related to poor economical conditions and the lack of demand for natural gas. These factors have resulted in a continuing shift in favor of oil targeted drilling which will provide immediate additions to the cash flow for companies and a minor amount of commitment type drilling in order to protect land tenure requirements. The overall drilling success ratio for the year was 59 percent with 45 completions out of the 76 wells drilled.

Exploratory drilling declined by 53 percent from 64 wells in 1982 to 30 wells in 1983. This drilling had 19 successful wells for a success ratio of 63 percent, and the successes were classified as 3 new pool oil discoveries, 9 new pool gas discoveries and 7 exploratory outpost completions to established pools. Most of the activity was directed to the Permian and Triassic oil play in the general Fort St John area with a minor amount of drilling for Debolt gas in the Foothills Belt north of the Peace River. The exploratory drilling highlight of the year however was the completion of an oil discovery in the Desan Lakes area located approximately 100 kilometres northeast of Fort Nelson. The discovery well, licenced as a Slave Point gas prospect, recovered clean Mississippian oil from several shallow productive zones. The extent of the discovery will not be known until after the 1984 winter drilling season although a significant new exploration oil play is expected to develop.

Development drilling was essentially the same as the previous year with 46 wells drilled compared to the 45 in 1982. Of the 46 wells drilled, 20 were completed for oil and 6 for gas for an overall success ratio of 57 percent. Most of the wells drilled, 38 out of the 46 were directed to the development of oil which would qualify for the New Oil Reference Price under the Federal/Provincial Incentive Program Agreement. The most active oil development objective was the Belloy Formation in the Eagle and Stoddart areas. Other oil zone objectives included the Doig, Halfway, Boundary Lake, North Pine, Cecil, Dunlevy, and Gething intervals. A few gas wells were drilled for the purpose of retaining leases and one gas well was drilled for deliverability.

Geophysical activity was down slightly with 106 crew weeks compared to the 112 in 1982. Seismic activity was general throughout northeast British Columbia with emphasis on the Fort St John area for oil prospects and the Sikanni Foothills area for natural gas. A limited amount of geophysical activity was also carried out in the Fernie Basin of the southeast sector. In this area, seismic, gravity and geochemistry programs were completed as a preliminary exploration phase leading to additional seismic work in 1984 and eventual exploratory drilling.

LAND DISPOSITION

During 1983 there were seven dispositions of Crown petroleum, natural gas and geothermal rights. Of this number, five dispositions covered petroleum and natural gas rights where tender bonuses were required, one disposition was in the form of tendering under a work program bidding system and the one disposition of geothermal rights was also under the same type of system. The five tender bonus dispositions offered a total of 165 parcels with 110 being awarded. This number covered 141 148 hectares for which tender bonuses amounting to $26 014 217.00 were received. This bonus is approximately $10 million greater than that received in 1982 when $16 724 133.00 was received for the 123 parcels of exploration rights granted covering 166 441 hectares. The additional tender bonus can be attributed to an oil discovery approximately 100 kilometres northeast of Fort Nelson in February 1983. A comparison with the previous three years' disposition is as follows:

Year	Parcels Offered	Parcels Disposed	Total ha	Tender Bonus $	Average Price Per ha $
1980.....	735	558	441 297	181 266 804	410.76
1981.....	443	316	599 208	60 776 403	101.43
1982.....	169	123	166 441	16 724 133	100.48
1983.....	165	110	141 148	26 014 217	184.30

(The 1981 figures include nine parcels covering 283 014 hectares of petroleum and natural gas rights on the Queen Charlotte Islands, which were disposed of for an average price per hectare of $0.18.)

In February 1983 nine permit parcels of oil and gas rights covering 154 837 hectares in the Fernie Basin of the Province were made available under the work program bidding system. Under this method any award is based on what is considered to be the best work program consisting of geological or geophysical exploration and drilling. Chevron Canada Resources Limited was awarded the nine permit parcels by virtue of their program in which they committed to spend an amount of $7 150 000.00 over a four year period. This expenditure consists of $2 150 000.00 on geophysical and geological exploration and $5 000 000.00 in drilling during the fourth year. At the end of the fourth year the company may retain the exploration permits for a further two years provided they commit to the drilling of an additional exploratory well. This may also be repeated in order to hold the permits for their seventh and eighth years at which time the company would be able to select leases.

The first disposition of geothermal rights held in British Columbia and, also, the first to be held in Canada, was advertised and awarded in June 1983. The disposition offered six geothermal permit parcels covering 49 716 hectares in the Mt Cayley area which is located approximately 100 kilometres north of Vancouver. A work program submitted by O'Brien Energy and Mines Limited was accepted for one of the permits available. The commitment from O'Brien is to undertake yearly obligations over a five year period which could result in an expenditure of $4 249 720.00 if all obligations are exercised. The other five geothermal permit parcels were not awarded.

PLANNING FOR RENEWED OFFSHORE EXPLORATION

The petroleum industry has indicated an interest in renewing offshore exploration activity off British Columbia's coast. Although questions of ownership and jurisdiction over the area have not been settled, the province and the federal government reached an agreement during the year to cooperate in a joint review of the environmental and directly related socio-economic implications of offshore petroleum exploration activities. The area covered by the agreement extends seaward of the low water mark to the limit of the continental rise between 50°40'N and 54°40'N.

Initial Environmental Evaluations were prepared and submitted to both governments by Chevron Canada Resources Limited and Petro-Canada Inc. for use in the public review, which is to take place in 1984.

HIGHLIGHTS OF PETROLEUM RESOURCES DIVISION ACTIVITIES

This section describes the highlights of both the technical and administrative work carried out by the Division during the year.

LEGISLATION

Amendments to the Drilling and Production Regulation pertaining to petroleum operations were made during the year. Besides changes of a 'housekeeping' nature, modifications were completed in the legislation dealing with air pollution control, disposal of waste, and requirements of construction and equipment located near water bodies.

No changes were made during the year to the *Petroleum and Natural Gas* or *Geothermal Resources Acts*.

MEDIATION AND ARBITRATION BOARD

The composition of the Board for 1983 remained as it was in 1982. That is D. (Ed) Smith, Chairman; Cecil Ruddell, Vice Chairman; John Martin and John Strain, Members.

The Mediation and Arbitration Board is established under Part 3 of the *Petroleum and Natural Gas Act*. Its authority and powers are covered by Sections 6 to 32 inclusive. These sections empower the Board to:

(a) Grant Rights of Entry to oil and gas companies over alienated lands where such Right of Entry has been refused by the landowner.

(b) Determine conditions for Right of Entry and set compensation to be paid therefore.

(c) Appoint a Member of the Board to act as a Mediator between a petroleum company and a landowner when an impasse develops respecting Right of Entry.

(d) If Mediation proves unsuccessful, convene an Arbitration Hearing, receive exhibits and hear evidence from both Applicant and Respondent prior to determining the compensation for Right of Entry respecting wellsite, campsite, roadway and/or flowline installations.

(e) When requested, conduct Arbitration Hearings to review and set annual rental on leases and previous Board Orders of more than five year's duration.

(f) Terminate Rights of Entry when an operator ceases to occupy land and a Certificate of Restoration has been issued by the Ministry. To amend or recind Orders from time to time, as circumstances and conditions dictate.

The Board conducted numerous on-site inspections in 1983. The inspections covered proposed new Rights of Entry for the purposes of drilling or laying flowlines and at existing well or pipeline locations where some particular problem came to the Board's attention at the request of a surface owner.

The number of new Rights of Entry and Arbitration cases decreased from the previous year. This was due partly to the continued decline in field activity, but also as a direct result of increased emphasis by the Board in resolving potential conflicts by mediation.

The mediation procedure is proving to be a successful method of resolving many conflicts at an informal level, thus reducing the number of disputes that require settlement by arbitration. The Board views this development as a positive benefit to both surface and subsurface owners.

ENGINEERING AND OPERATIONS BRANCH

The workload in the Engineering and Operations Branch continued to be heavy while the staff count was under strength by 15 percent due to the freezing of vacated positions. The key position of Chief Reservoir Engineer remained vacant for the whole of 1983.

In addition to its normal regulatory work load the Branch carried out a number of essential projects discussed in the Section Reports below. More important of these projects were the development of implementation procedures arising from Natural Gas Marketing Study and the updating of regulations on the control of air pollution and the disposal of wastes in field operations.

DEVELOPMENT ENGINEERING

The Development Engineering Section is responsible for the administration of all matters related to the location, drilling, completion, and abandonment of petroleum and geothermal wells. This involves the assurance that operators of all wells located, drilled, and produced conform with the regulation and submit the required applications, reports, and information to the Division.

Approval of well authorizations to drill proposed well locations is granted by the Section after review and reference to the Titles and Geological Branches. There were 110 well authorizations issued for petroleum drilling, 34 per cent more than during 1982, principally due to the flurry of applications processed at year-end. Throughout the life of a well the status, well name or classification may be changed as circumstances require. During the year statuses were changed on 89 occasions, well names on 124, and well classifications on 8.

Each quarter, field and pool descriptions are published and circulated to the industry based upon the geological interpretation made by the Division staff. All drilling and service rigs operating in the Province must have a valid Rig Licence. Ninety-six were renewed while one new one was issued during the year.

In addition to comprehensive well data records, all geological and geophysical reports submitted for work credits as well as the Division correspondence files of the three Branches are maintained by the Development Section. The microfiche library containing British Columbia well data which is produced by a commercial service company continued to be used by the Division staff. This is supplemented by a set of all logs taken from the British Columbia wells plus the important nearby wells.

Greater use of the Section's computer installation was made during 1983. Indices, (alphabetical, numerical and location) were transferred from the Word Processor unit to the computer. In addition to identification of wells where data is incomplete, this computer application can provide an immediate confirmation of the Well Count carried in Branch publications. Transfer of data compiled for Annual Schedule of Wells to the computer continued during the year. When complete this will provide staff immediate access to summarized information on all drilled wells.

Implementation of the Govier Study recommendations was initiated for use on the computer during the coming year. This study presents a new marketing and royalty system for natural gas in the Province. The royalty would be based on three factors in addition to the gas volume produced i.e. age since first production, depth, and ease of accessibility of the well location.

One extension to the definition of NORP oil (New Oil Reference Price) was approved in 1983 and consideration was under study for another. Thirty five applications were approved during the year, twenty-one for well locations outside the original NORP outlines and fourteen for wells where production was shut-in over three consecutive years. Another federal government scheme was supported by the section by provision of required well information in conjunction with their Petroleum Incentive Program.

A second six-month production period was examined to determine the Province's oil capability. Although the individual well data did not match those calculated from the first study done in 1982, the same approximate production efficency of 75 percent was determined as a Provincial average.

No progress was made in 1983 in the project to modify the Petroleum Reporting System which compiles production data although substantial advances were made to computerize the royalty calculations made by the Mineral Revenue Branch.

DISTRICT OPERATIONS

The District Office is located at Charlie Lake, which is in the Peace River area of northeastern British Columbia. During 1983 over 346 000 kilometres were driven throughout the Province by staff to enforce field aspects of the Drilling and Production, Geophysical, and Geothermal regulations.

Drilling activity during 1983 declined relative to 1982 with the result that only 76 wells were drilled. To ensure that safety in operations was maintained, inspections were performed on 197 occasions at active drilling sites. Continuance of the program initiated in 1982 to reclaim abandoned well sites and maintain acceptable conditions at all production sites resulted in a total of 9095 inspections.

A further 2128 inspections at oil and gas batteries were necessary to continue the oil well productivity study, to make environmental assessments regarding ambient air monitoring, to assure compliance with gas conservation orders and that good engineering practices were followed.

Monitoring of the accuracy of gas measurement equipment continued throughout the year with fast meter checks done on 1468 occasions and complete meter checks done 1572 times.

To confirm the reliability of the subsurface pressure data that is supplied to the Division by industry, there were 1922 calibrations performed on subsurface pressure gauges using the British Columbia standard dead weight tester. To further insure reliability of the subsurface data, the British Columbia tester was calibrated against its Alberta counter part with results within acceptable limits.

To supplement data required by the Reservoir Engineering section, 39 static pressure gradients were run, 237 oil and 124 gas well tests were witnessed.

Geophysical field activity remained at a moderate level, very similar to 1981 and 1982. Inspections on geophysical operations were carried out 151 times during 1983.

Inspection of salt water disposal systems and the witnessing of segregation tests were emphasized during 1983.

The District Office continued its involvement during 1983 as co-chairman of the Northeastern British Columbia Oil Spill Co-operative, and as the provincial representative on the PROSCARAC (Prairie Regional Oil Spill Containment and Recovery) committee taking an active role at all meetings and training exercises.

In September a training exercise of the co-operative was held at Charlie Lake. The OSCAR (Oil Spill Containment And Recovery) trailer and equipment were deployed to clean up a simulated oil spill from the lake. Raw canola oil was used in the simulated spill and clean up recovery was essentially 100 percent. The results of this exercise were important as the lake is the source of water for the City of Fort St John, and a real spill with ineffective clean up would be very damaging to the industry's image.

During the first half of 1983, a project was initiated at the District Office to issue Certificates of Restoration to as many of the abandoned wellsites as possible. This project involves reinspection of nearly 2500 sites to confirm that final reclamation was done. Commencing in June approximately 1600 of these sites were inspected. About 1000 of them were done by helicopter while the remainder were ground inspections utilizing 4 wheel drive vehicles or all terrain vehicles. It was observed that about 300 sites required additional reclamation work. During the year 841 Certificates of Restoration were issued.

To improve safety and work efficiency in the field, methods were examined to improve the radio communication system between the District Office and the inspection technicians. This study took advantage of the latest advances in radio communications and resulted in the purchase of 36 channel programmable field radios plus a base station located at the District Office.

During 1983 the District Office was involved in various projects. Contributions were suggested for amendments to the Drilling and Production regulation regarding electrical installation and pollution control. Revisions were made to the published wellsite construction guidelines and regulations were under preparation for well servicing blow-out prevention. Investigation of the ambient air quality within a thirty-mile radius of the City of Fort St John continued during the year.

RESERVOIR ENGINEERING

An important responsibility of the Reservoir Engineering Section is to estimate on a continuing basis, the oil and gas reserves in British Columbia. Table P3 is a summary of the estimates in SI units as of 1983 12 31 and the remaining reserves are summarized below:

Oil, established.....	23 515.2	10^3m^3	(147 978.1 MSTB)
Natural Gas, established -			
Raw.....	292 338	10^6m^3	(10 376.2 BSCF)
Marketable.....	238 622	10^6m^3	(8 469.6 BSCF)
Natural Gas Liquids -			
Propane.....	1 498.3	10^3m^3	(9 439.3 MSTB)
Butanes.....	2 218.8	10^3m^3	(13 971.4 MSTB)
Pentanes Plus.....	4 324.1	10^3m^3	(27 211.0 MSTB)
Sulphur.....	11 250.4	10^3m^3	(11 072.7 MLT)

It may be observed from Table P3 that oil reserves have decreased by 690.7 10^3m^3 from 1982. Additions due to drilling and revisions were 661.5 10^3m^3 and 727.2 10^3m^3 respectively. Production reduced the reserves by 2079.4 10^3m^3. Raw gas reserves at end of 1983 were 5.43 10^9m^3 lower than 1982. Additions due to drilling were 2.55 10^9m^3. Revisions and production decreased the reserves by 7.98 10^9m^3. Of the remaining established gas reserves some 104.3 10^9m^3 of raw gas or 85.7 10^9m^3 of marketable gas, 36 percent were not connected to pipeline at year end.

A study group on the marketing of British Columbia natural gas completed a broad review of the systems of developing and marketing natural gas in British Columbia, Alberta, and Saskatchewan. The study group consisted of various Ministry staff and was chaired by Dr. George W. Govier. Engineering staff from the Division assisted the study group by defining reservoir parameters that were critical in establishing an economically feasible and practical new gas royalty system. Following this and a variety of other work, the study group developed and proposed a series of recommendations that were designed to stimulate exploration, development, and marketing of British Columbia natural gas. Comments from industry on the recommendations set out are presently being reviewed.

The Reservoir Section devoted considerable effort to the preparation of a submission to the National Energy Board entitled "Supply of Crude Oil, Natural Gas and Natural Gas Liquids in British Columbia". This report contains forecasts of natural gas, natural gas liquids and crude oil producibility for the period 1983-2005. The oil producibility forecast contains estimates of future additions due to drilling, waterflood modifications and tertiary schemes.

A screening procedure to determine which pools would be suitable for a tertiary scheme was completed. Reservoir, geological and petrophysical limits were defined and applied to the oil pools. As a result of the screening procedure it was estimated that the Province has the potential to recover an additional 20 million cubic metres of reserves from the existing oil fields which would not have been recovered by conventional primary and secondary techniques. Approximately 90% of potential tertiary oil would be recovered using miscible flooding techniques. Sources of supply of carbon dioxide and light hydrocarbons used for the purpose of miscible flooding from Fort St John and Fort Nelson gas plants were examined and it was determined that they have an adequate supply of injection fluids for miscible flooding.

Analyses are being completed to assess the economic feasibility and required government policies to promote the development of tertiary oil recovery from oil fields in the Province.

A study of the performance of the Roger-Pine Point 'A' gas pool was conducted and it was concluded that wells with open hole completions should be recompleted to a 15-20 percent penetration of the formation for optimum recovery. The operator was advised of the results of the study and asked to make an application for a Good Engineering Practice area allowable for the pool.

Nineteen daily oil allowables and fourteen daily gas allowables were approved for individual wells. The majority of these approvals were for wells in the Fort St John and Boundary Lake areas. Some six hundred oil and gas pools were reviewed and Branch requirements for bottom hole pressure measurements, deliverability and absolute open flow potential tests were communicated to the appropriate coordinating operators. Considerable time was devoted to analysing the results of these pressure surveys and tests. Pool performance and material balance plots were maintained and updated for all major pools where sufficient pressure and production data are available to permit meaningful interpretation. Regular discussions were held with the Geological Branch to resolve differences between material balance/pool performance reserves estimates and those derived from volumetric estimates. Routine assistance was provided to other branches with technical evaluations of lease renewals and assessments of Crown Lands posted for disposition of petroleum and natural gas rights. Many requests for miscellaneous information were handled during the year and as in previous years, a map was prepared to show additions and changes to reported maximum detected hydrogen sulphide concentrations in produced gases.

GEOLOGICAL BRANCH

ECONOMIC GEOLOGY

Major projects in 1983 included the publication of a map showing the geothermal potential of British Columbia and the completion to publication of a series of regional stratigraphic cross sections of the northeastern oil and gas producing sector of the Province. The geothermal map, compiled in collaboration with the Mineral Resources Division, combines information on geothermal gradients from deep drill holes with available data on thermal springs, young volanic centres and the geotectonic setting of the Province. The Neogene volcanic deposits of the central interior region and the Devonian reef structure of the northeast are added to the map because of the anticipated and known warm water reserves of these rocks.

A series of cross sections were compiled as a means of assisting resource evaluation work and the promotion of industry activity. These sections have been constructed in an attempt to render an integrated stratigraphic picture of Middle Devonian reef and off-reef environments and regional relationships of the overlying Upper Devonian in northeastern British Columbia. The study has employed geophysical wireline logs and information from the Division data files. These sections in concert with published information in adjacent areas will provide valuable background data for use in assessing the hydrocarbon potential of the northeastern sector.

As a result of work completed in 1982, the Geological Survey of Canada made available its Open File Report 921 entitled, "Source Rock-Oil Shale Potential of the Jurassic Kunga Formation, Queen Charlotte Islands". The project was partially funded by the Ministry and involved a detailed chemical analysis of approximately 300 shale samples taken from two locations on Graham Island. The study concluded that the oil shale potential of the sampled areas, although encouraging, is not definitive at this time.

A meeting with other agencies and private sector interests was held to provide coordination with the program of the federal government for the assessment of the geothermal resource potential of British Columbia. It was concluded that any expenditure into geological assessments and research at this time would be to provide basic knowledge of the resource potential and the requirements for its development so the economics can be assessed and the resource developed effectively when requirements change.

Numerous meetings with representatives of industry were held on matters concerning resource potential and exploration procedures in the Province. These included discussions on the disposition of geothermal rights in the Garibaldi Volcanic Belt area of southern British Columbia; the drilling of stratigraphic test holes on Graham Island; the drilling for conventional natural gas and natural gas associated with coal formations on Vancouver Island, and the prospects of finding oil and gas in the area south of Cranbrook as a result of geophysical and exploratory drilling activity in the State of Montana.

Five new fields were designated, although one, Eagle West, results from the division of the Eagle field. The other four include Bougie with Debolt, Slave Point and Pine Point gas pools; Sikanni with Kiskatinaw and Debolt gas pools; Sojer with a Baldonnel gas pool and Trutch with Charlie Lake and Halfway gas pools. Field boundary changes, mostly extensions, were implemented at the following fields: Blueberry, Boundary Lake, Buick Creek North, Buick Creek West, Bulrush, Bulrush East, Bullmoose, Cecil Lake, Dahl, Dawson Creek, Eagle, Gundy Creek, Helmet North, Inga North, July Lake, Milligan Creek West, Peejay, Pickell, Septimus, Squirrel, Sunrise, Tommy Lakes, Tsea, Two Rivers and Weasel.

A detailed study of Belloy cores, (including thin sections), well cuttings and wireline logs was carried out to determine the structural and stratigraphic relationships of the Belloy oil and gas pools in the Stoddart West, Stoddart, Stoddart South, and Eagle areas. Pool segregation is apparently due to any one, or combination of three factors. These are normal faulting, non deposition and/or erosion at the top of or within the Belloy, and abrupt facies changes. In Stoddart South for instance a gas pool lies only a few metres below an oil pool. An examination of Halfway formation data in the oil and gas productive Flatrock area confirms the presence of faulting and the need to increase the number of separate pools. A review of the gas productive Kiskatinaw sand in the Alces (Twp. 84, Rge. 14 W6) area to determine reservoir continuity resulted in the conclusion that four single well pool reservoirs exist.

Other assignments included preparation of geological summaries and tabulation of characteristics of 18 oil reservoirs for an analysis related to possible enhanced oil recovery (EOR) schemes. Also completed was a review of 15 pools to determine why they had substantial hydrocarbon reserve discrepancies when compared to those of other agencies. Maps, cross sections, graph and reservoir data tabulation of the Helmet-Slave Point 'A', Helmet North-Slave Point 'A', Clarke Lake-Slave Point 'A' and Parkland-Wabamun 'A' gas pools were prepared for the forthcoming Canadian Society of Petroleum Geologists publication "Oil and Gas Pools in Canada". Additionally, thin sections of typical British Columbia reservoir rock types were photographed and descriptions made for the Charlie Lake field office geological display.

Many leases strata, title determinations and related productive zone identifications were processed, and routine assistance was provided in advising other branches with geological assessment of Crown Lands posted for disposition of Crown petroleum and natural gas rights, and petroleum and natural gas lease continuations; the reclassification of wells for the purpose of confidentiality and new pool discovery status; and appraisals concerning industry production schemes, such as concurrent production and good engineering practice (GEP's), plus the disposal of water production and surplus mud.

GEOPHYSICAL

Project work continued during the year with the integration of non-confidential seismic data into existing subsurface mapping coverage. In this type of interpretative work no attempt is made to convert the seismic reflection time maps to depth, the major contribution by seismic being fault delineation and structural trends. This revised and up-dated mapping is made available through publication and is used extensively by industry in developing drilling prospects and assessing lands posted for the disposition of Crown petroleum and natural gas rights by public tender.

The Geophysical Section in coordination with Economic Geology was responsible for the assessment of a number of land-use proposals with reference to their petroleum and geothermal resource potential. These proposals by other government agencies are carefully vetted in order to protect the right to explore and develop lands considered to be potential in oil, gas and/or geothermal resources.

RESERVOIR GEOLOGY

Although 1983 drilling activity had a substantial 30 percent reduction in comparison to 1982, the Reservoir Geology Section carried out a comprehensive program of assessment and mapping in detail of all oil and gas accumulations encountered by the drill. Structural, stratigraphic, and reservoir geologic data made available through drilling were used as a basis for new and revised map constructions, reservoir studies, evaluation of reserves and the control of remedial work, recycling, repressuring and secondary recovery projects.

Noteworthy pool maps changes include conversion of the Bulrush East-Halfway 'A' gas pool to an oil pool as a consequence of the Charter et al Bulrush d-6-K/94-A-16 discovery; separation of the original Buick Creek-Doig 'A' oil pool into two pools on the basis of re-interpretation of the geology initiated by anomalous pressure data; amalgamation of the Cecil Lake-Belloy 'A' oil pool into the Eagle Belloy 'B' pool; remapping of the Dahl Bluesky gas pool by hydrocarbon pore volume to achieve a better determination of reserves; designation of a new Halfway 'G' gas pool at Flatrock because production data confirmed that the Champlin et al Flatrock 11-17-84-16 well was not part of the Halfway 'E' pool; designation of a new Halfway 'B' gas pool at Flatrock West again because performance data established that the CZAR et al W Flatrock 10-35-84-17 well was separate from the Halfway 'A' pool; the Milligan-Halfway 'B' gas pool was eliminated and partly replaced by extension of the gas cap of the Weasel-Halfway 'C' oil pool because of performance data from the Placid PCP W Milligan d-28-G/94-H-2 gas well; the original small Eagle-Belloy 'A' oil pool was incorporated into the Eagle-Belloy 'F' pool, and because of field changes the almalgamation is now designated as the Eagle West-Belloy 'B' oil pool. Finally the Mattson 'A', Banff 'A' and Nahanni 'A', gas pools of the Beaver River field were deleted because all wells in the field are abandoned.

TITLES BRANCH

Out of the 110 parcels of oil and gas rights awarded at the five dispositions held during 1983, 28 parcels were located in Desan oil area. The tender bonuses received from these 28 parcels represented approximately 50% of the total received during the year.

Geophysical exploration in 1983 remained at approximately the same level as in 1982. There was a total of 65 programs completed compared to 73 the previous year. A total of 97 programs were approved, including 18 carried over from 1982. During the year four were cancelled and, at year's end, 10 had not been commenced.

In 1983 there was a total of 3 516 kilometres of seismic line recorded compared to 4 055 kilometres during 1982.

At December 31, 1983, there were 8 709 827 hectares of oil and gas rights held under 7 901 various forms of title. This compares to 11 664 169 and 8 221 respectively at the end of 1982. The majority of the decrease in total holdings occurred with the surrender of 53 permits containing 2 174 217 hectares of oil and gas rights which were located in the Nechako Basin Area of the province.

The following table summarizes the various forms of title held and includes the transactions that were completed during 1983.

Form Title	Number	Hectares
Permits	258	3 507 122
Natural Gas Licences	2	7 136
Drilling Licences/Reservations	47	158 062
Leases(All Types)	7 594	5 037 507
Total	7 901	8 709 827

The following transactions were completed during 1983:

1. Permits --

Issued	20
Renewed	162
Converted to Lease	40
Cancelled	64
Transferred	68

2. Drilling Licences --

Issued	19
Renewed	30
Converted	4
Cancelled	1
Transferred	6

2. Drilling Licences --

Issued	19
Renewed	30
Converted	4
Cancelled	1
Transferred	6

3. Leases

Issued	329
Annual Rental Paid	5 379
Continued Under Penalty	413
Continued NOT Under Penalty	1 100
Cancelled	580
Transferred	1 306

4. Natural Gas Licences --

Issued	2

	Number Advertized	Number Awarded
5. Crown Sales --		
Permits	8	7
Drilling Licences	20	19
Leases	137	84
Total	165	110

6. Geophysical Licences - Issued 28

7. Affidavits of Work - Approved -

Permits	44
Leases	16

8. Miscellaneous Recordings -

(Grouping Notices, Encumbrances, Mergers, etc.)..... 20 000

9. Unit Agreements - Approved..... 0

OFFSHORE ADMINISTRATION BRANCH

Planning activities and discussions related to the possible resumption of offshore petroleum exploration progressed during 1983.

Early in the year, negotiations were initiated with the Canadian Oil & Gas Lands Administration of the federal government of environmental planning for a possible resumption of exploration off the coast of British Columbia. As a result of these negotiations, an agreement was signed on September 8, 1983 whereby the provincial and federal governments made a commitment to cooperate in a joint review of the effects of environmental and directly related socio-economic implications of offshore petroleum exploration. This Agreement is without prejudice to questions of ownership or jurisdiction.

The area covered by the Agreement extends north of Vancouver Island in Hecate Strait/Dixon Entrance to the Canada-U.S. border. Although there are no active provincial permits in the area, the Province has accepted Chevron Canada Resources Limited and Petro-Canada Inc. as the designated companies with an interest in renewing offshore exploration to provide background information for the purposes of the Review.

Chevron and Petro-Canada submitted Initial Environmental Evaluations (IEEs) to both governments. These studies, in addition to a Preliminary Environmental Assessment prepared by the provincial Ministry of Environment, will form the information base for the Review.

Under the terms of the Agreement the Ministry of Energy, Mines and Petroleum Resoures and the Canadian Oil & Gas Lands Administration were required to conduct a technical evaluation of these IEEs in cooperation with the provincial Ministry of Environment and the federal Departments of Environment and Fisheries and Oceans. The purpose of the Technical Evaluation will be to assess the IEEs in terms of adequacy, competence and completeness to provide the required background information for the Public Review. Planning for this Technical Evaluation took place in the latter part of the year.

The IEEs were also distributed widely among coastal community libraries and interest groups. Notification of their availability and the intent to seek public comment at a later date were published in coastal community newspapers.

In accordance with the Agreement a five member Panel is to be appointed to hold a formal Public Review and to make recommendations to the federal and provincial Ministries of Environment on the terms and conditions under which offshore petroleum exploration might proceed in a safe and environmentally responsible manner, should a decision be made to renew exploratory drilling activity. The Review will be administered jointly under the provincial *Environment Management Act* and the federal Environmental Assessment Review Process.

During the year communication with coastal communities, public interest groups, and the petroleum industry was maintained, as well as liaison with other federal and provincial departments with an interest in renewed offshore exploration activity.

The Branch was discontinued in April but its functions continued to be coordinated by the Office of the Assistant Deputy Minister.

STATISTICAL TABLES

Table P1 - Hectares of Crown Petroleum and Natural Gas Rights Held, 1970-1983

	1974	1975	1976	1977	1978	1979	1980	1981	1982	1983
Petroleum and natural gas permits	6 567 416	5 379 502	5 363 440	5 232 700	9 057 241	4 727 388	8 331 140	6 855 975	6 173 951	3 507 122
Petroleum and natural gas leases	2 592 138	2 255 952	2 387 335	2 911 776	3 131 372	3 795 470	4 248 550	4 833 344	5 048 562	4 737 286
Natural gas licences	6 299	3 160	2 904	14 721	- --- ---	7 559	25 346	1 619	- --- ---	7 156
Natural gas leases	194 240	197 368	203 789	209 117	228 480	255 903	259 307	308 853	313 717	298 673
Petroleum leases	520	1 287	1 287	1 287	1 548	1 548	1 548	1 548	1 548	1 548
Drilling reservations & Drilling licences	146 019	128 570	212 529	338 681	426 117	422 868	430 669	247 816	126 791	158 062
Totals	9 506 632	7 965 859	8 171 284	8 708 282	8 904 738	9 170 756	13 296 560	12 249 155	11 664 169	8 709 827

Table P2 - Petroleum and Natural Gas Revenue, 1947-1983

	1947/74	1975	1976	1977	1978	1979	1980	1981	1982	1983	1947/1983
Rental and Fees	$	$	$	$	$	$	$	$	$	$	$
Permits	52 840 262	2 150 965	2 114 161	2 128 190	1 882 589	1 696 423	3 768 152	1 895 471	2 096 108	1 912 926	72 485 247
Drilling reservations & Drilling licences	1 470 252	75 635	124 196	172 078	266 654	223 760	251 047	121 233	177 073	309 483	3 191 411
Natural gas licences	77 114	4 155	3 838	- --- ---	47 502	43 262	29 826	20 668	31 630	8 515	266 910
Leases (all)	108 998 363	10 242 543	11 925 123	13 680 926	16 782 862	19 428 644	23 665 473	25 296 643	28 640 263	34 027 803	296 688 643
Total Rentals	163 385 991	12 473 298	14 167 318	15 981 194	18 979 607	21 392 089	27 714 498	27 334 015	30 945 074	40 258 727	372 631 811
Crown Reserve Disposition Bonuses											
Permits	121 007 715	6 623 647	27 548 820	60 017 593	49 518 449	45 949 254	21 126 236	22 531 164	4 837 360	4 457 560	363 617 598
Drilling licences	39 721 776	2 708 463	6 152 419	30 633 861	64 497 213	60 987 012	68 356 992	6 338 253	4 539 818	13 756 051	297 663 858
Leases	88 519 596	3 417 137	9 525 202	34 816 472	63 473 986	84 109 339	91 781 576	31 906 986	7 346 955	7 800 606	422 693 859
Crown Reserve Disposition Totals	249 249 087	12 749 247	43 226 441	125 467 726	177 459 648	191 041 605	181 266 804	60 776 403	16 724 133	26 014 217	1 083 975 311
Crown Royalties											
Gas	43 780 096	2 848 950	173 315	180 951	72 729	67 200	110 018	15 237	11 666	9 366	47 269 508
Oil	135 670 973	44 762 489	43 925 220	41 015 470	42 191 350	44 819 110	47 634 589	35 261 145	74 544 128	86 966 559	616 811 033
Processed products and penalties	1 275 340	570 321	711 810	888 799	1 075 377	1 048 746	1 624 942	1 762 012	1 624 973	2 166 301	12 748 621
Gas revenue from B.C. Petroleum Corp.	26 000 000	172 150 000	149 850 000	174 250 000	159 400 000	257 875 000	242 875 000	158 000 000	155 000 000	102 580 000	1 397 980 000
Crown Royalty Totals	206 726 409	220 351 740	194 660 345	216 335 220	202 739 456	303 810 056	292 244 549	215 038 394	231 180 767	191 722 226	2 274 809 162
Miscellaneous fees	428 971	18 541	32 248	64 583	69 392	82 490	95 029	86 027	181 210	113 161	1 151 652
Total Petroleum and Natural Gas Revenue	619 790 458	245 592 826	252 086 352	357 648 723	399 248 103	516 326 240	501 320 880	303 214 839	279 031 184	258 108 331	3 732 567 930

Table F3 - Established Hydrocarbon and By-product Reserves, December 31, 1983

	CRUDE OIL 10^3m^3	RAW GAS 10^6m^3	MARKETABLE GAS 10^6m^3 (1)	PROPANE 10^3m^3	BUTANES 10^3m^3	PENTANES 10^3m^3	SULPHUR 10^3t
Initial Reserves, Current Estimate	82 148.8	490 733	402 045	3 078.2	4 483.3	8 833.8	14 072.5
Cumulative Production to December 31, 1982	56 554.2	190 550	157 139	1 534.8	2 198.7	4 408.3	2 558.8
Remaining Reserves Estimate at December 31, 1982	24 205.9	297 766	242 699	1 533.5	2 262.0	4 359.9	11 430.0
Drilling in 1983	+ 661.5	+ 2 550	+ 2 360	+ 2.3	+ 4.3	+ 8.8	+ 3.2
Revisions in 1983	+ 727.2	- 133	- 153	+ 7.6	+ 18.3	+ 56.8	+ 80.5
Production in 1983	-2 079.4	- 7 845	- 6 284	- 45.1 (2)	- 65.8 (2)	- 101.4 (2)	- 263.3 (2)
Remaining Reserves at December 31, 1983	23 515.2	292 338	238 622	1 498.3	2 210.8	4 324.1	11 250.4

Notes: Gas volumes measured at 101.325 kPa and 15°C

(1) Figures in this column are estimates of marketable gas i.e. the gas available to the transmission line after removal of acid gases and a percentage of liquid hydrocarbons.

(2) These figures are estimates based on average gas analyses and estimated Plant recoveries. Actual recoveries of propane, butanes, pentanes, and sulphur were 62.5, 80.3, 131.6 10^3m^3, 259.0 10^3t respectively during 1983.

Table F4 - Drilling and Production Schemes Approved in 1983

Field/Area	Pool	Area or Well	Date of Approval
Approval of Concurrent Production			
Cecil Field	North Pine 'A'	Twp. 84, Rge. 18, Section 14	1983 03 11
Cecil Field	North Pine 'B'	Twp. 84, Rge. 18, SW 1/4 Section 12	1983 03 11
Stoddart South Field	Belloy 'A' and 'B'	Twp. 85, Rge. 19, W 1/2 Section 19, W 1/2 Section 20, W 1/2 Section 29, S 1/2 Section 30	1983 02 10
Approval of Concurrent Production and Good Engineering Practice			
Cecil Field	North Pine 'A'	Twp. 84, Rge. 17, NW 1/4, Section 7 and Section 18	1983 03 11
Approval of Good Engineering Practice			
Cecil Field	North Pine 'C'	Twp. 84, Rge. 18, NW 1/4 and E 1/2 Section 12	1983 03 11
Grizzly North Field	Baldonnel 'A'	NTS 93-I-15, Blk. G, Units 31-33, 41-43, 51-55, 61-65 71-79, 81-89, 94-99, Blk. H, Units 16-19, 26-29, 38, 39, 40, 48, 49, 50, 59, 60, 70, 80, 90, Blk. J, Units 4-9, 16-19, 26-29.	1983 03 22
Revised Good Engineering Practice			
Weasel Field	Halfway	NTS 94-H-2, Blk. G, Units 18, 19, 28 and 29	1983 11 01
Approval of Salt-water Disposal			
Siphon Field	Dunlevy 'A'	Texaco Siphon 11-29-86-16	1983 05 30

Table P5 - Daily Oil Allowables Issued, 1983

Field	Pool	Well Name	DOA m^3	Effective Date
Boundary Lake	Boundary Lake 'A'	Eagle Boundary 6-7-84-14	7.1	1983 11 02
Boundary Lake	Boundary Lake 'A'	Esso et al Boundary A8-28-84-14	13.7	1983 01 25
Buick Creek West	Gething 'A'	OIL et al W Buick b-8-C/94-A-14	8.1	1983 01 12
Bulrush East	Halfway 'A'	Charter et al Bulrush d-6-K/94-A-16	17.2	1983 03 09
Cecil Lake	Cecil 'C'	PEX Cecil 16-2-84-18	8.5	1983 03 29
Cecil Lake	Belloy	Scurry CBGO Eagle 13-25-84-18	21.0	1983 09 21
Drake	Halfway 'B'	TAI et al Drake b-92-K/94-H-1	4.5	1982 06 29
Eagle	Belloy 'B'	Scurry CBGO Eagle 14-23-84-18	23.3	1983 02 25
Eagle	Belloy 'B'	Scurry CBGO Eagle 16-23-84-18	16.7	1983 08 25
Eagle	Belloy 'B'	Scurry CBGO Eagle 7-26-84-18	14.5	1983 10 13
Flatrock	Halfway 'F'	Cornell Flatrock A14-7-84-16	9.4	1983 02 02
Oak	Halfway 'B'	Eagle et al Oak 15-6-86-17	25.9	1983 12 15
Siphon East	Bluesky 'A'	Sceptre et al E Siphon 10-28-86-15	7.5	1983 07 12
Stoddart West	Belloy 'C'	Scurry et al W Stoddart 14-23-85-20	13.2	1983 10 05
Other Areas	Boundary Lake	Eagle et al Boundary 16-5-84-14	7.6	1983 09 06
Other Areas	Inga	Natomas et al S Inga 6-29-84-23	4.5	1983 01 13
Other Areas	North Pine	Wincan TAI Murdale 8-25-87-20	4.5	1982 11 30
Other Areas	Belloy	Scurry PPC Eagle 14-16-84-18	14.3	1983 11 07
Other Areas	Belloy	CBGO et al Stoddart 16-24-85-20	9.8	1983 09 08

Table P6 - Daily Gas Allowables Issued, 1983

Field	Pool	Well Name	DOA 10^3m^3	Effective Date
Airport	Bluesky 'A'	PEX WP Airport 6-33-83-17	60.0	1983 08 30
Bubbles North	Halfway 'A'	PEX et al N Bubbles d-95-B/94-G-8	118.7	1983 10 19
Buick Creek North	Dunlevy 'A'	PEX et al W Buick b-6-F/94-A-14	66.2	1983 09 30
Buick Creek North	Dunlevy 'A'	PEX WP N Buick b-28-F/94-A-14	60.0	1983 09 30
Buick Creek West	Bluesky 'A'	Union W Buick a-61-E/94-A-14	60.0	1983 11 23
Buick Creek West	Bluesky 'C'	PEX et al W Buick a-25-E/94-A-14	60.0	1983 06 30
Buick Creek West	Dunlevy 'B'	PEX WP W Buick d-4-E/94-A-14	68.0	1983 09 30
Buick Creek West	Dunlevy 'E'	Union W Buick a-61-E/94-A-14	60.0	1983 11 23
Helmet	Slave Point 'C'	Calais et al Helmet d-73-L/94-P-7	71.3	1983 08 06
Monias	Halfway 'B'	Wainoco Monias 7-30-82-20	60.0	1983 02 18
Roger	Pine Point 'A'	Quintana MB Roger b-29-A/94-J-15	364.8	1983 02 01
Stoddart	Belloy 'A'	Kilo N Pine A6-28-85-18	60.0	1983 08 15
Other Areas	Halfway	Ram et al Septimus 7-5-82-19	60.0	1982 02 20
Other Areas	Debolt	Remington S Grassy d-54-A/94-G-6	62.2	1982 09 14

Table F7 - Wells Drilled and Drilling, 1983

Well Authorisation Number	Well Name	Date Spudded	Date Rig Released	1983 Depth	Status at 1983 12 31
5832	ATAPCO PCP Klua b-94-B	83 03 01	83 04 05	2,389.0	Debolt Gas
5834	ATAPCO Sunrise A7-3-79-17	83 03 12	83 03 22	988.0	Cadotte Gas
5825	BP Aspen d-51-K	83 03 01	83 03 19	1 350.0	Baldonnel Oil
5800	BP Beatton b-37-J	83 01 13	83 01 26	1 165.0	Abandoned-Dry
5820	BP W Nig d-65-D	83 02 02	83 02 26	1 457.0	Baldonnel Oil
5871	Bankeno et al Flatrock 8-30-84-16	83 11 25	83 12 08	1 395.0	Abandoned-Dry
5860	CEGO et al Stoddart 8-24-85-20	83 10 30	83 11 22	2 010.0	Abandoned-Dry
5843	CEGO et al Stoddart 16-24-85-20	83 06 30	83 07 17	1 990.0	Belloy Oil
5868	CEGO et al Stoddart 14-25-85-20	83 11 24	83 12 16	1 965.0	Bear Flat Oil
5812	Canterra Noel a-23-G	83 02 06	83 04 20	2 715.0	Cadomin Gas
5809	Canterra Petitot a-65-L	83 01 25	83 03 10	2 428.0	Abandoned-Dry
5836	Canterra et al N Sahtaneh d-1-B	83 06 15	83 07 23	2 355.0	Jean Marie Gas
5781	Canterra Sunset b-16-C	82 12 08	83 03 16	3 400.0	Cadotte Gas
5796	Cdn Res BCRIC Border c-20-J	83 01 11	83 01 17	813.9	Gething Gas
5808	Cdn Res BCRIC Border a-78-K	83 01 19	83 02 01	800.0	Abandoned-Dry
5748	Cdn-Sup et al Coolie a-44-H	82 02 10	83 02 04	1 965.0	Pine Point Gas
5626	Cdn-Sup N Helmet b-85-H	83 02 07	83 03 15	2 035.0	Jean Marie Gas
5876	Cdn-Sup et al Sikanni b-70-E	83 12 21			Drilling
5816	Charter et al Bulrush d-6-K	83 02 07	83 02 18	1 150.0	Halfway Oil
5895	Charter et al Bulrush d-26-K	83 12 22	83 12 31	1 150.0	Bluesky Gas
5829	Chaut et al W Flatrock 6-22-84-17	83 02 21	83 03 07	1 476.5	Abandoned-Dry
5747	Cherokee et al Donnie b-88-B	83 01 31	83 02 24	1 431.0	Halfway Gas
5805	Cornell Silver b-A26-B	83 01 02	83 01 16	1 225.0	Abandoned-Dry
5823	Cornell et al E Silver a-22-I	83 02 07	83 02 16	1 260.0	Abandoned-Dry
5814	Dome Beavertail d-23-B	83 02 13	83 02 23	1 324.0	Abandoned-Dry
5878	Dome et al Osprey d-11-C	83 12 29			Drilling
5873	Eagle et al Boundary 14-7-84-13	83 12 28			Drilling
5866	Eagle et al Boundary 6-4-84-14	83 11 30	83 12 09	1 407.0	Abandoned-Dry
5845	Eagle et al Boundary 16-5-84-14	83 07 29	83 08 08	1 398.0	Boundary Lake Oil
5849	Eagle et al Boundary 6-7-84-14	83 08 09	83 08 18	1 273.0	Boundary Lake Oil
5865	Eagle et al Boundary 6-9-84-14	83 12 10	83 12 20	1 360.0	Boundary Lake Oil
5863	Eagle et al Oak 15-6-86-17	83 11 11	83 11 27	1 425.0	Halfway Oil
5842	Enerwest Ft St John 11-30-83-17	83 07 14	83 07 28	1 571.0	Abandoned-Dry
5838	Esso et al Boundary 14-1-84-14	83 08 24	83 09 03	1 380.0	Boundary Lake Oil
5840	Esso et al Boundary 6-28-84-14	83 07 30	83 08 21	1 263.0	Abandoned-Dry
5803	Esso Milligan b-80-H	83 03 03	83 03 30	1 170.0	Abandoned-Dry
5831	GEOG et al Peejay c-96-D	83 12 30			Drilling
5804	Gulf AEC Desan b-64-D	83 01 16	83 02 12	2 136.0	Mississippian Oil
5884	Gulf AEC Desan d-A95-D	83 12 28			Drilling
5882	Gulf AEC Helmet d-13-L	83 12 28			Drilling
5904	Gulf AEC Helmet d-33-F	83 12 31			Drilling
5801	Gulf AEC Jackfish d-50-D	83 01 15	83 03 07	2 620.0	Pine Point Gas
5811	Gulf AEC Midwinter b-78-F	83 02 18	83 03 25	2 255.0	Banff, Jean Marie & Pine Point Gas
5858	Kilo Buick b-56-I	83 11 12	83 12 22	1 400.0	Doig Oil
5883	Mobil Sierra d-88-K	83 12 17			Drilling
5841	Monsanto et al Rigel 14-14-87-17	83 07 07	83 07 18	1 131.0	Dunlevy Oil
5857	PCI Siphon A10-20-86-16	83 10 26	83 11 03	1 225.0	Abandoned-Dry
5847	PCP Farmington 8-7-79-13	83 08 10	83 08 25	1 790.0	Abandoned-Dry
5856	PCP Farmington 8-11-79-14	83 09 12	83 09 27	1 785.0	Abandoned-Dry
5752	PEX Cecil 16-2-84-18	83 01 21	83 02 07	1 566.0	Cecil Oil & North Pine Oil

Table P7 - Wells Drilled and Drilling, 1983 - Continued

Well Authorization Number	Well Name	Date Spudded	Date Rig Released	1983 Depth	Status at 1983 12 31
5762	PEX S Julienne d-71-L	83 02 11	83 03 17	1 923.0	Abandoned-Dry
5822	PEX GAO Kotcho b-24-C	83 02 07	83 03 16	2 192.0	Abandoned-Dry
5824	PEX GAO Kotcho d-82-K	83 02 12	83 03 20	2 065.0	Slave Point Gas
5818	PEX et al Peejay d-3-I	83 02 18	83 02 28	1 182.8	Abandoned-Dry
5817	PEX et al Peejay b-75-G	83 03 02	83 03 11	1 217.0	Abandoned-Dry
5826	PEX Weasel a-70-A	83 02 05	83 02 16	1 131.0	Abandoned
5815	Placid Beatton b-8-J	83 02 20	83 03 01	1 180.0	Abandoned-Dry
5806	Polaris et al Pesh d-83-I	82 12 24	83 02 10	1 777.0	Slave Point Gas & Jean Marie Gas
5790	Quintana HB Roger b-29-A	82 11 06	83 01 16	2 125.0	Pine Point Gas
5875	Remington Esso Lily c-33-L	83 12 05			Drilling
5797	Remington Sikanni b-14-A	83 03 25	83 06 15	1 950.0	Debolt Gas
5787	Remington Sikanni a-32-I	82 10 30	83 03 19	2 950.0	Debolt Gas
5810	Remington Sikanni d-53-I	83 08 08	83 10 29	2 230.0	Debolt Gas
5903	Scurry Cecil 8-25-84-18	83 12 20			Drilling
5837	Scurry CEGO Cecil 8-23-84-18	83 06 05	83 07 04	1 897.0	Abandoned-Dry
5901	Scurry CEGO Eagle 14-10-84-18	83 12 28			Drilling
5869	Scurry CEGO Eagle 6-21-84-18	83 11 20	83 12 19	1 722.0	Belloy Oil
5802	Scurry CEGO Eagle 14-23-84-18	83 01 06	83 02 16	1 663.0	Belloy Oil
5844	Scurry CEGO Eagle 16-23-84-18	83 07 06	83 07 29	1 897.0	Belloy Oil
5877	Scurry CEGO Eagle 5-25-84-18	83 12 09	83 12 29	1 900.0	Belloy Oil
5855	Scurry CEGO Eagle 13-25-84-18	83 09 01	83 09 20	1 663.0	Belloy Oil
5867	Scurry CEGO Eagle 15-25-84-18	83 11 16	83 12 07	1 900.0	Belloy Oil
5859	Scurry CEGO Eagle 7-26-84-18	83 09 21	83 10 10	1 655.0	Belloy Oil
5862	Scurry CEGO Eagle 6-36-84-18	83 10 18	83 11 07	1 663.0	Belloy Oil
5861	Scurry PPC Eagle 8-16-84-18	83 10 15	83 11 04	1 795.0	Belloy Oil
5848	Scurry PPC Eagle 14-16-84-18	83 08 08	83 08 27	1 872.0	Belloy Oil
5854	Scurry et al Mallard 8-7-85-19	83 09 21	83 10 12	1 990.0	Belloy Oil
5833	Scurry W Stoddart 16-21-85-20	83 03 19	83 04 05	1 460.0	Abandoned-Dry
5852	Scurry et al W Stoddart 14-23-85-20	83 08 27	83 09 19	1 956.0	Belloy Oil
5830	Scurry et al W Stoddart 14-3-86-20	83 02 22	83 03 22	1 978.0	Abandoned-Dry
5835	Scurry Wolf b-91-B	83 03 17	83 03 27	1 260.0	Abandoned-Dry
5807	Snell Brandt d-69-L	83 01 10	83 03 06	2 565.0	Abandoned
5851	Shell N Cypress d-77-L	83 10 09			Drilling
5839	Shell Flathead d-12-A	83 08 25			Drilling
5846	Suncor Peejay d-21-I	83 08 26	83 09 06	1 167.0	Abandoned-Dry
5819	Texaco et al W Dahl d-13-K	83 02 13	83 02 24	1 237.0	Abandoned
5558	Total et al Helmet c-80-G	82 03 09	83 02 04	1 936.0	Jean Marie Gas
5850	Union Aitken d-41-L	83 09 21	83 10 02	1 445.0	Abandoned-Dry
5794	Westmin et al Farrell 10-32-85-25	83 01 07	83 03 17	2 600.0	Abandoned-Dry

Table P8 - Summary of Drilling and Production Statistics, 1983

	January	February	March	April	May	June	July	August	September	October	November	December	Totals
Well authorizations issued	15	4	4	1	3	4	5	7	3	5	21	38	110
Well authorizations cancelled	10	1	2	1	---	---	3	1	---	---	---	---	18
Wells spudded	11	17	8	---	---	3	5	9	4	2	7	14	80
Rigs operated (during month)	16	23	20	4	1	4	7	6	7	7	6	15	42[1]
Rigs operating (at month end)	14	16	4	1	1	2	2	6	5	3	8	13	
Metres Drilled -													
Development	5 293,0	8 909,8	12 803,0	1 460,0	---	1 897,0	6 589,0	5 806,0	6 166,0	3 100,0	6 323,0	15 019,0	73 365,8
Exploratory Outpost	---	6 428,0	19 864,5	2 389,0	---	1 950,0	2 355,0	---	---	4 220,0	1 795,0	---	39 001,5
Exploratory Wildcat	813,9	6 678,0	4 985,0	2 715,0	---	---	---	1 790,0	1 785,0	---	---	---	18 766,9
Totals	6 106,9	22 015,8	37 652,5	6 564,0	---	3 847,0	8 944,0	7 596,0	7 951,0	7 320,0	8 118,0	15 019,0	131 134,2
Oil wells	---	6	1	---	---	---	3	3	3	2	3	6	27
Gas wells	2	5	9	2	---	1	1	---	---	1	---	1	22
Abandoned wells	2	6	11	1	---	1	1	2	2	1	2	2	31
Service wells	---	---	---	---	---	---	---	---	---	---	---	---	---
Standing wells	---	---	---	---	---	---	---	---	---	---	---	---	---
Totals	4	17	21	3	---	2	5	5	5	4	5	9	80
Producible oil wells	942	948	947	945	945	945	945	950	953	953	956	963	---
Producing oil wells	651	652	648	640	643	641	648	661	664	663	668	657	---
Production in m^3	182 049,6	167 550,5	184 543,4	173 672,1	153 203,7	163 922,3	170 612,0	181 306,3	175 886,8	177 350,0	168 515,0	179 193,7	2 078 771,3
Average daily production	5 872,6	5 983,9	5 953,0	5 789,1	4 942,1	5 464,1	5 503,6	5 848,6	5 862,9	5 720,9	5 617,2	5 780,4	5 695,3
Producible gas wells	1 925	1 930	1 937	1 939	1 941	1 942	1 946	1 948	1 951	1 949	1 943	1 945	---
Producing gas wells	592	546	370	347	215	425	430	402	496	468	527	616	---
Production in 10^3m^3 (raw)	884 566,6	647 361,1	597 608,7	514 000,8	420 859,8	365 951,8	344 838,0	333 869,5	530 523,6	660 997,8	901 420,3	1 164 812,0	7 368 560,8[2]
Average daily production (raw)	28 534,4	23 120,0	19 277,7	17 133,4	13 576,1	12 198,4	11 123,8	10 769,9	17 684,1	21 322,5	30 047,3	37 574,8	20 242,1

SUMMARY FOR 1983

Drilled		Completions	
Locations drilled	76	Oil wells*	27
Multizone wells	4	Gas wells*	22
Re-entries	—	Service wells	--
Totals	80	Standing wells	—
		Abandoned	31
		Totals	80

1 Rigs operated during 1983
2 Non-associated gas production only
* Each zone of a multizone well is counted as one well

Table F9 - Monthly Crude Oil and Condensate Production by Field and Poole

(Volumes in m^3 at 15°C)

	January	February	March	April	May	June	July	August	September	October	November	December	Totals
Airport -													
Halfway B	--- --- -	71.2	72.6	46.8	27.6	37.6	49.4	46.2	38.9	27.4	33.5	29.2	480.4
Aitken Creek -													
Gething A	1 433.2	1 155.5	1 275.5	1 193.1	961.8	1 265.5	1 339.6	1 251.3	1 050.9	1 049.3	1 017.0	1 079.8	14 070.5
Bear Flat -													
Bear Flat A	204.1	181.9	189.7	193.6	193.9	167.8	181.7	188.6	208.4	216.2	211.9	215.7	2 353.5
Beatton River -													
Halfway A	2 636.8	2 531.4	2 881.0	2 549.7	2 346.2	1 962.8	2 325.3	3 097.1	2 905.1	3 282.8	2 862.6	3 223.7	32 802.5
Halfway B	--- --- -	--- --- -	--- --- -	--- --- -	--- --- -	50.9	--- --- -	--- --- -	--- --- -	--- --- -	--- --- -	--- --- -	50.9
Halfway C	110.5	76.6	78.6	76.4	29.6	67.9	35.2	63.8	67.7	26.8	69.3	54.8	757.2
Halfway D	763.0	673.0	787.4	611.6	788.8	577.3	603.6	724.5	602.3	789.4	671.1	663.1	8 255.1
Totals	3 712.3	3 281.0	3 747.0	3 237.7	3 164.6	2 658.9	2 962.1	3 885.4	3 575.1	4 099.0	3 603.0	3 941.6	41 865.7
Beatton River West -													
Bluesky A	2 741.6	2 685.7	3 062.3	2 756.8	3 003.9	2 543.6	1 868.4	2 892.1	2 690.1	3 292.8	2 769.7	2 932.7	33 239.7
Beaverdam -													
Upper Halfway A[1]	19.1	14.3	22.7	17.8	14.0	17.0	18.9	18.3	20.1	18.2	19.8	19.6	219.8
Beavertail -													
Halfway B	158.9	142.2	169.5	158.8	104.3	--- --- -	99.4	183.8	143.5	139.5	107.4	163.2	1 570.5
Birch -													
Baldonnel B[1]	39.0	4.0	31.1	2.8	--- --- -	5.8	24.3	14.8	44.7	4.6	--- --- -	50.6	221.7
Baldonnel C	640.8	858.4	721.0	557.0	420.5	753.8	698.0	582.4	650.7	755.5	604.3	800.0	8 042.4
Totals	679.8	862.4	752.1	559.8	420.5	759.6	722.3	597.2	695.4	760.1	604.3	850.6	8 264.1
Blueberry -													
Debolt A	2 130.6	2 651.0	2 475.8	2 972.0	2 941.6	2 611.6	2 539.9	2 191.4	2 705.2	2 770.2	2 402.4	2 445.2	30 836.9
Debolt B	896.7	1 521.1	1 671.1	1 437.4	1 618.4	1 668.6	1 659.7	1 530.6	1 689.2	1 689.2	1 543.5	1 583.1	18 476.2
Totals	3 027.3	4 172.1	4 146.9	4 445.4	4 560.0	4 280.2	4 199.6	3 722.0	4 394.4	4 391.0	3 945.9	4 028.3	49 313.1
Boundary Lake -													
Baldonnel B[1]	7.0	6.2	7.3	--- --- -	--- --- -	--- --- -	--- --- -	--- --- -	--- --- -	15.0	42.0	25.0	102.5
Cecil A	14.1	54.6	61.7	50.1	52.1	54.5	38.9	41.6	35.2	27.9	27.4	23.0	481.1
Cecil B	--- --- -	--- --- -	--- --- -	--- --- -	--- --- -	--- --- -	13.7	14.0	13.4	14.0	13.5	1.8	70.4
Boundary Lake A	60 260.6	55 615.4	61 649.7	58 543.3	57 783.6	57 053.8	60 423.5	62 846.0	60 691.7	58 152.1	60 728.8	60 475.0	714 225.5
Halfway A	535.7	503.8	546.4	496.8	532.6	454.8	524.2	541.0	411.2	510.4	525.5	491.8	6 074.2
Totals	60 817.4	56 180.0	62 265.1	59 090.2	58 368.3	57 563.1	61 000.3	63 444.6	61 151.5	58 719.4	61 337.2	61 014.6	720 951.7
Boundary Lake North -													
Halfway B[1]	182.2	--- --- -	--- --- -	--- --- -	--- --- -	--- --- -	113.9	27.5	207.6	10.4	--- --- -	14.4	293.8	849.8
Halfway C[1]	221.7	173.9	201.7	219.7	110.0	212.9	170.1	195.7	195.1	205.8	161.9	256.1	2 324.2
Halfway D	177.8	159.1	175.6	163.6	126.6	79.8	--- --- -	--- --- -	--- --- -	227.6	132.9	155.0	1 398.0
Totals	581.7	333.0	377.3	383.3	236.6	406.2	197.6	403.3	205.5	433.4	309.2	704.9	4 572.0

Bulck Creek -													
Dunlevy A	---	---	---	---	---	14,9	24,2	29,8	31,9	33,7	6,8	---	141,3
Dunlevy C[1]	167,2	34,0	---	---	---	---	17,6	98,6	10,6	3,1	111,1	146,8	589,0
Dalg A	577,5	515,7	534,5	495,2	359,0	365,1	391,8	433,4	446,8	430,2	425,0	438,7	5 428,7
Totals	744,7	549,7	534,5	495,2	359,0	380,0	433,4	581,8	489,3	467,0	542,9	579,5	6 157,0
Bulck Creek West -													
Gething A	13,9	---	---	---	---	29,9	48,3	37,7	63,9	37,7	43,4	50,8	325,6
Dunlevy B[1]	3,5	3,0	1,4	---	---	8,9	17,1	6,0	9,1	1,7	---	1,3	52,0
Dunlevy D	99,5	80,9	89,8	60,5	65,0	87,2	21,2	28,6	49,2	39,3	7,5	43,0	671,7
Totals	116,9	83,9	91,2	60,5	65,0	126,0	86,6	72,3	122,2	78,7	50,9	95,1	1 049,3
Bulrush -													
Halfway A	286,0	252,3	291,8	290,3	293,2	278,1	236,4	454,6	467,3	475,3	311,0	423,1	4 059,4
Halfway B	26,7	26,9	31,6	13,3	28,4	15,0	25,4	21,1	7,1	20,5	1,5	34,0	251,5
Totals	312,7	279,2	323,4	303,6	321,6	293,1	261,8	475,7	474,4	495,8	312,5	457,1	4 310,9
Bulrush East -													
Halfway A	---	---	---	---	---	---	---	722,3	606,2	541,7	522,8	539,9	2 932,9
Cecil Lake -													
Siphon A	49,2	44,2	48,6	44,6	47,9	43,0	45,0	44,4	43,0	45,3	44,7	44,6	544,5
Cecil A	657,5	654,4	774,2	470,7	315,2	444,3	301,1	377,6	462,9	492,8	459,1	450,0	5 839,9
Cecil B	---	---	---	---	---	---	---	9,8	7,9	5,5	19,1	6,7	49,0
Cecil C	---	---	75,3	319,5	228,5	136,5	155,8	133,5	108,8	156,1	150,7	194,7	1 655,4
North Pine A	746,7	716,7	636,7	816,4	670,6	487,4	328,2	433,4	765,4	597,2	562,0	556,1	7 316,8
North Pine A[1]	31,0	65,3	43,9	54,1	49,5	43,5	41,4	59,4	53,1	56,3	64,0	69,1	630,6
North Pine B	---	---	---	---	---	---	---	6,1	19,4	105,4	142,3	31,5	304,7
North Pine C	468,4	410,9	529,7	494,6	519,0	379,0	171,4	305,2	508,4	476,8	367,0	402,7	5 033,1
Totals	1 952,8	1 891,5	2 106,4	2 199,9	1 830,8	1 533,7	1 040,9	1 369,4	1 968,9	1 935,4	1 788,9	1 755,4	21 374,0
Crush -													
Halfway A	848,1	722,8	733,8	615,9	580,3	762,8	709,7	550,2	590,2	721,0	543,8	642,3	8 000,9
Current -													
Halfway A	583,9	523,9	590,1	499,4	454,6	538,7	533,8	566,7	361,7	422,1	480,4	443,2	5 998,5
Drake -													
Halfway B	205,8	181,7	89,7	21,6	126,0	130,8	107,9	116,9	100,1	102,5	42,1	70,1	1 295,0
Eagle -													
Siphon A	30,5	39,3	46,7	45,2	25,8	31,1	28,7	24,0	24,7	48,0	36,7	13,1	393,8
Belloy B	3 023,0	3 446,4	4 336,2	4 522,8	3 463,0	4 553,5	4 619,9	4 854,3	4 684,5	4 696,1	4 148,4	4 740,0	51 090,1
Totals	3 053,5	3 485,7	4 382,9	4 568,0	3 488,8	4 584,6	4 648,6	4 878,3	4 709,2	4 746,1	4 185,1	4 753,1	51 483,9
Eagle West -													
Belloy A	42 348,5	37 508,3	41 072,0	40 244,7	29 681,3	38 083,2	39 939,1	42 201,9	39 275,4	39 232,6	35 206,0	38 965,3	463 758,3
Confidential	---	---	---	---	---	---	---	---	---	---	---	33,6	33,6
Total	42 348,5	37 508,3	41 072,0	40 244,7	29 681,3	38 083,2	39 939,1	42 201,9	39 275,4	39 232,6	35 206,0	38 998,9	463 791,9
Fireweed -													
Dunlevy A[1]	4,0	55,8	---	---	---	2,4	90,6	66,8	---	---	---	144,4	334,0
Dunlevy D	---	---	---	---	---	123,3	141,6	96,8	49,9	108,5	1,1	116,8	27,5	661,5
Totals	4,0	55,8	---	---	---	125,3	144,0	187,4	112,7	108,5	1,1	116,8	141,9	995,5

[1] Condensate

Table F9 - Monthly Crude Oil and Condensate Production by Fields and Pools - Continued

(Volumes in m^3 at 15°C)

	January	February	March	April	May	June	July	August	September	October	November	December	Totals
Flatrock -													
Boundary A	24.4	27.8	31.5	28.5	31.1	29.7	36.4	33.9	26.8	25.7	19.6	14.0	329.4
Boundary B	405.0	366.9	400.3	375.6	383.3	364.9	365.9	380.3	352.9	364.9	352.1	355.7	4 469.8
Halfway A[1]	25.7	--- --- -	35.8	11.4	--- --- -	1.1	34.8	17.3	32.5	--- --- -	--- --- -	18.1	175.7
Halfway E	428.3	253.4	401.6	173.2	285.0	--- --- -	349.9	289.8	318.0	182.6	174.2	234.7	3 070.7
Halfway E[1]	80.2	196.0	28.2	25.1	--- --- -	--- --- -	68.4	80.3	72.5	9.4	49.5	61.6	652.2
Totals	963.6	824.1	897.4	613.8	699.4	395.7	855.4	781.6	802.7	582.6	595.4	682.1	8 893.8
Flatrock West -													
Halfway B [1]	610.6	519.0	607.9	272.4	--- --- -	439.6	576.5	560.4	536.4	65.8	--- --- -	419.7	4 606.3
Fort St. John -													
Charlie Lake A	419.8	464.6	231.7	294.1	247.6	199.2	381.7	470.1	309.6	382.8	441.2	666.6	4 509.0
Inga -													
Inga A	15 226.9	12 124.3	12 989.7	12 172.8	10 241.9	12 024.6	12 776.9	12 897.8	12 193.3	13 261.5	11 555.6	12 028.1	149 493.2
Inga A[1]	8.5	--- --- -	--- --- -	--- --- -	--- --- -	--- --- -	--- --- -	--- --- -	--- --- -	--- --- -	--- --- -	--- --- -	8.5
Inga B	48.1	51.0	59.1	53.3	48.0	51.1	54.7	50.8	49.1	51.0	50.2	45.6	612.0
Totals	15 283.5	12 175.3	13 048.8	12 226.1	10 289.9	12 075.7	12 831.6	12 948.6	12 242.4	13 312.3	11 605.8	12 073.7	150 113.7
Jedney -													
Baldonnel A[1]	16.7	9.6	6.9	--- --- -	--- --- -	--- --- -	11.0	12.5	14.2	3.5	--- --- -	14.5	88.9
Halfway A[1]	3.6	.4	--- --- -	--- --- -	--- --- -	--- --- -	4.5	6.9	3.0	.9	--- --- -	5.4	24.7
Totals	20.3	10.0	6.9	--- --- -	--- --- -	--- --- -	15.5	19.4	17.2	4.4	--- --- -	19.9	113.6
Kiwa -													
Debolt A[1]	--- --- -	--- --- -	--- --- -	--- --- -	--- --- -	--- --- -	--- --- -	--- --- -	--- --- -	69.1	--- --- -	--- --- -	69.1
Laprise -													
Baldonnel A[1]	--- --- -	--- --- -	8.0	8.0	41.5	--- --- -	--- --- -	--- --- -	--- --- -	--- --- -	--- --- -	12.5	70.0
Nica -													
Nica A	479.9	517.8	451.9	430.1	138.3	373.4	394.2	604.6	637.1	460.3	499.4	465.6	5 452.6
North Pine A	188.3	119.7	219.3	151.0	117.0	166.4	193.4	263.0	33.6	196.8	105.4	224.3	1 978.2
Totals	668.2	637.5	671.2	581.1	255.3	539.8	587.6	867.6	670.7	657.1	604.8	689.9	7 430.8
Nike -													
Gething A	580.3	519.9	584.6	74.1	--- --- -	--- --- -	--- --- -	--- --- -	--- --- -	--- --- -	--- --- -	525.0	2 283.9
Milligan Creek -													
Gething	--- --- -	--- --- -	--- --- -	--- --- -	--- --- -	--- --- -	--- --- -	--- --- -	--- --- -	--- --- -	30.6	--- --- -	30.6
Gething B	32.6	35.6	60.5	20.5	34.8	61.9	51.9	58.9	56.8	56.7	54.6	39.7	564.5
Halfway A	7 957.5	7 843.1	8 548.3	7 904.7	6 699.3	8 195.8	8 270.0	8 087.2	7 475.0	7 873.4	6 945.6	7 080.6	92 880.5
Halfway A[1]	--- --- -	--- --- -	20.7	--- --- -	--- --- -	--- --- -	--- --- -	--- --- -	--- --- -	--- --- -	--- --- -	--- --- -	20.7
Totals	7 990.1	7 878.7	8 629.5	7 925.2	6 734.1	8 257.7	8 321.9	8 146.1	7 531.8	7 930.1	7 030.8	7 120.3	93 496.3
Nettle -													
Gething A	260.5	243.6	248.5	--- --- -	--- --- -	--- --- -	--- --- -	--- --- -	--- --- -	--- --- -	--- --- -	123.5	876.1

Nig Creek -													
Baldonnel A[1]	--- --- -	--- --- -	--- --- -	35.6	108.4	54.0	66.0	77.2	66.9	59.3	9.1	--- --- -	476.5
North Pine -													
North Pine B	133.6	128.3	137.5	93.2	89.8	145.0	162.7	110.1	88.5	115.0	128.5	101.9	1 434.1
Oak -													
Cecil B	107.3	96.6	110.2	104.4	100.0	98.4	103.5	111.6	106.9	107.7	106.7	109.7	1 263.0
Halfway A[1]	623.7	170.2	270.8	62.7	117.3	12.7	268.5	347.4	271.8	111.2	145.9	151.6	2 553.6
Halfway B	1 062.7	1 024.1	1 120.8	1 088.6	963.3	974.2	848.9	988.4	945.8	1 000.1	896.7	1 014.4	11 928.0
Totals	1 793.7	1 290.9	1 501.8	1 255.7	1 180.6	1 085.3	1 220.7	1 447.4	1 324.5	1 219.0	1 149.3	1 275.7	15 744.6
Osprey -													
Halfway A	378.4	173.2	313.4	340.9	184.8	317.1	247.9	151.5	200.0	306.5	240.6	296.7	3 150.4
Peejay -													
Halfway	10 633.1	9 887.9	11 049.2	9 922.8	8 909.8	7 575.4	5 853.4	7 404.5	9 174.7	10 048.3	9 751.1	11 194.7	109 404.9
Halfway A	136.9	124.5	142.8	127.9	134.2	131.9	155.1	134.5	133.7	142.4	143.4	143.2	1 650.5
Halfway L	50.6	36.2	28.2	62.7	44.5	45.4	46.7	40.5	40.5	37.3	46.7	40.0	519.3
Totals	10 820.6	10 048.6	11 220.2	10 113.4	9 088.5	7 752.7	4 055.2	7 579.5	9 348.9	10 228.0	9 941.2	11 377.9	111 574.7
Peejay West -													
Halfway A	549.3	686.3	569.2	448.5	268.4	361.3	480.1	320.9	517.5	410.0	450.3	480.0	5 541.8
Pickell -													
Halfway A[1]	47.9	2.8	54.7	--- --- -	--- --- -	--- --- -	--- --- -	--- --- -	--- --- -	--- --- -	--- --- -	--- --- -	105.4
Rigel -													
Dunlevy A	218.6	200.6	150.2	169.1	54.6	200.0	218.1	311.4	266.4	265.6	267.4	266.0	2 588.0
Dunlevy B	— --- -	--- --- -	--- --- -	--- --- -	7.7	36.9	41.7	39.2	38.5	35.0	30.0	29.9	258.9
Dunlevy D	--- --- -	--- --- -	--- --- -	--- --- -	--- --- -	--- --- -	--- --- -	--- --- -	--- --- -	--- --- -	22.3	--- --- -	22.3
Dunlevy E	55.1	29.9	210.0	46.1	— --- -	204.9	158.4	251.6	208.8	170.7	226.9	215.6	1 758.0
Dunlevy I	97.0	50.3	9.8	124.0	104.2	96.2	86.9	109.3	100.3	52.7	110.9	114.7	1 056.3
Totals	370.7	280.8	370.0	339.2	166.5	538.0	505.1	691.5	614.0	524.0	657.5	626.2	5 683.5
Rigel East -													
Gething A[1]	--- --- -	--- --- -	--- --- -	--- --- -	--- --- -	--- --- -	--- --- -	--- --- -	--- --- -	--- --- -	--- --- -	6.4	6.4
Septimus -													
North Pine A	5.2	14.3	18.9	8.1	--- --- -	4.5	7.3	4.6	2.7	1.2	--- --- -	--- --- -	66.8
Siphon -													
Dunlevy A[1]	56.8	13.2	4.0	19.0	21.4	12.8	67.7	26.6	2.5	26.4	37.4	75.2	363.0
Dunlevy C	15.9	20.5	21.4	23.4	28.3	27.0	25.9	20.3	27.0	25.7	28.0	23.0	286.4
Totals	72.7	33.7	25.4	42.4	49.7	39.8	93.6	46.9	29.5	52.1	65.4	98.2	649.4
Siphon East -													
Bluesky A	32.6	30.6	31.8	26.8	30.0	28.4	27.2	28.3	27.5	26.8	30.6	3.0	323.6
Bluesky A[1]	14.6	--- --- -	--- --- -	--- --- -	--- --- -	--- --- -	--- --- -	--- --- -	--- --- -	--- --- -	--- --- -	--- --- -	14.6
Totals	47.2	30.6	31.8	26.8	30.0	28.4	27.2	28.3	27.5	26.8	30.6	3.0	338.2

[1] Condensate

Table F9 - Monthly Crude Oil and Condensate Production by Fields and Pools - Continued

(Volumes in m^3 at 15°C)

	January	February	March	April	May	June	July	August	September	October	November	December	Totals
Squirrel -													
North Pine A	163,0	136,8	154,1	210,3	128,2	238,5	255,0	187,9	161,6	190,7	165,7	143,6	2 139,4
North Pine B	38,0	17,0	37,3	94,8	22,0	14,7	65,8	58,8	38,5	15,5	43,8	20,0	466,0
Totals	201,0	153,8	191,4	305,1	150,2	253,2	320,8	246,7	200,1	206,2	209,5	163,6	2 601,4
Stoddart -													
Cecil A	31,9	24,3	16,0	16,4	17,5	14,3	34,5	35,0	30,3	25,1	26,2	16,0	287,9
Cecil B	37,1	--- --- -	--- --- -	--- --- -	111,6	169,4	149,5	159,5	129,5	140,8	150,9	195,8	1 244,1
Cecil C	--- --- -	--- --- -	--- --- -	--- --- -	--- --- -	--- --- -	--- --- -	--- --- -	--- --- -	--- --- -	195,0	140,8	335,8
Bolloy A	56,8	54,0	4,9	53,3	21,8	--- --- -	--- --- -	--- --- -	--- --- -	--- --- -	74,3	79,7	344,4
Bolloy C	422,9	338,7	440,1	237,9	34,9	485,9	410,6	323,6	292,8	302,5	429,5	292,3	4 011,7
Totals	548,7	417,2	460,6	307,6	185,8	669,6	594,6	518,1	452,8	468,4	675,9	724,6	6 223,9
Stoddart South -													
Bolloy A	295,5	476,7	617,2	220,3	126,3	510,4	712,7	705,1	786,3	752,7	637,4	719,6	6 560,2
Bolloy C	--- --- -	--- --- -	--- --- -	--- --- -	--- --- -	24,2	93,4	67,8	34,0	10,4	14,1	--- --- -	243,9
Totals	295,5	476,7	617,2	220,3	126,3	534,6	806,1	772,9	820,3	763,1	651,5	719,6	6 804,1
Stoddart West -													
Bear Flat A	234,4	188,5	218,3	83,3	44,3	198,6	129,5	163,4	172,9	157,0	132,5	146,8	1 869,3
Doig B	87,2	72,5	81,4	87,6	18,5	80,0	108,3	95,0	97,8	108,2	92,7	70,6	999,6
Bolloy A[1]	235,3	192,0	213,4	266,4	296,9	127,1	152,9	87,0	192,8	301,8	112,6	298,6	2 476,8
Bolloy C	4 665,5	4 375,9	4 897,8	4 366,0	3 790,7	4 339,0	5 246,2	5 160,7	4 751,0	5 041,1	4 417,1	5 193,1	56 242,1
Bolloy D[1]	32,9	28,4	16,4	8,5	--- --- -	4,1	30,1	17,8	--- --- -	--- --- -	--- --- -	19,7	197,9
Totals	5 255,3	4 657,1	5 427,3	4 811,8	4 150,4	4 748,8	5 667,0	5 523,9	5 214,5	5 608,1	4 754,7	5 728,8	61 745,7
Two Rivers -													
Halfway B	14,7	93,6	56,4	81,7	64,9	65,6	57,1	51,8	66,7	63,1	60,7	--- --- -	676,3
Wessel -													
Halfway	6 929,1	6 772,1	6 838,1	6 885,2	6 235,4	3 213,3	6 860,9	6 585,7	6 908,2	6 934,9	6 084,9	7 365,6	77 611,4
Halfway[1]	--- --- -	7,8	--- --- -	9,0	--- --- -	--- --- -	--- --- -	--- --- -	--- --- -	--- --- -	--- --- -	5,7	22,5
Halfway B	150,2	120,6	137,4	128,2	30,8	56,0	9,5	80,0	83,7	148,1	33,1	31,7	1 009,3
Halfway F	74,6	119,8	103,6	102,8	94,7	72,8	36,2	55,1	63,5	17,8	2,5	20,6	764,0
Totals	7 153,9	7 020,3	7 079,1	7 125,2	6 360,9	3 342,1	6 906,6	6 720,8	7 055,4	7 100,8	6 120,5	7 421,6	79 407,2
Wessel West -													
Halfway A	990,8	787,2	959,0	926,3	220,8	665,0	728,4	964,4	812,5	668,2	744,5	818,3	9 285,4
Halfway B	83,7	64,8	34,7	64,7	17,2	10,9	30,3	71,6	65,0	46,5	68,8	41,6	599,8
Totals	1 074,5	852,0	993,7	991,0	238,0	675,9	758,7	1 036,0	877,5	714,7	813,3	859,9	9 885,2
Wildmint -													
Upper Halfway A	420,0	348,7	413,3	387,7	336,8	279,0	429,4	402,2	364,5	353,0	341,5	362,8	4 438,9
Halfway A	2 855,0	2 785,0	3 970,5	4 210,7	3 502,2	4 074,2	4 059,7	4 113,6	3 892,6	3 921,1	3 508,0	3 406,5	44 299,1
Totals	3 275,0	3 133,7	4 383,8	4 598,4	3 839,0	4 353,2	4 489,1	4 515,8	4 257,1	4 274,1	3 849,5	3 769,3	48 738,0
Willow -													
Gething A	142,7	118,6	114,3	102,1	67,9	78,6	150,2	113,1	78,0	--- --- -	24,8	188,5	1 194,8
Wolf -													
Halfway A	766,9	661,8	398,5	615,3	611,4	744,9	620,6	387,2	454,0	701,4	647,4	871,1	7 482,5

Woodrush -													
Halfway A	7,9	7,9	---	---	---	---	---	3,2	18,2	---	---	7,9	13,6	98,7
Other Areas -														
Baldonnel	---	---	51,1	---	---	---	---	---	---	---	---	---	---	51,1
Septimus	104,5	95,5	108,0	19,7	---	---	---	---	---	---	---	---	70,2	397,9
Inga	157,9	93,2	---	10,7	39,5	74,9	94,4	90,4	81,8	26,3	50,4	83,0	802,5
Halfway	---	54,0	1,9	---	---	---	---	---	---	---	---	---	---	55,9
Confidential	---	---	---	---	---	---	---	---	---	---	---	---	23,5	23,5
Totals	262,4	242,7	161,0	30,4	39,5	74,9	94,4	90,4	81,8	26,3	50,4	176,7	1 330,9	
Totals -														
Crude	181 955,1	167 458,0	184 496,1	174 179,4	153 179,1	183 972,9	170 607,2	181 539,2	176 009,9	177 527,6	168 549,4	179 193,7	2 078 299,2	
Condensate	2 495,9	1 557,8	1 579,4	1 065,8	780,8	1 055,4	1 690,9	1 898,8	1 535,7	950,1	849,9	2 159,0	17 619,5	
Totals	184 451,0	169 015,8	186 075,5	175 241,2	153 959,9	185 027,9	172 298,1	183 438,0	177 541,6	178 477,7	169 399,3	181 352,7	2 095 878,7	

[1] Condensate

Table P10 - Monthly Non-associated and Associated Gas Production by Fields and Pools

(Volumes in 10^3m^3 at 101.325 kPa and 15°C)

	January	February	March	April	May	June	July	August	September	October	November	December	Totals
Airport -													
Bluesky A	773,0	636,5	801,4	493,8	291,4	450,5	478,7	471,9	420,5	432,5	484,7	486,0	6 522,5
Dunlevy A	690,9	660,0	214,6	88,9	--- --- -	118,6	531,8	527,6	533,2	87,2	51,3	728,5	4 222,6
Halfway B[1]	--- --- -	222,2	203,4	146,9	79,3	109,8	116,7	98,6	89,6	81,8	72,9	60,4	1 284,6
Totals	1 463,9	1 738,7	1 219,4	729,6	370,7	678,7	1 127,2	1 098,1	1 043,1	601,5	571,9	1 186,9	11 829,7
Aitken Creek -													
Gething A	--- --- -	--- --- -	--- --- -	--- --- -	1 862,7	--- --- -	--- --- -	--- --- -	--- --- -	126,3	99,7	51,5	2 100,2
Gething A[1]	4 397,3	4 039,1	4 292,5	4 071,2	3 522,2	4 126,9	4 171,1	4 225,5	4 064,1	4 050,2	3 957,8	3 865,9	48 783,8
Totals	4 397,3	4 039,1	4 292,5	4 071,2	5 384,9	4 126,9	4 171,1	4 225,5	4 064,1	4 176,5	3 929,6	4 009,3	50 884,0
Attachie -													
Upper Kiskatinaw A	836,4	926,1	1 592,9	1 191,4	1 472,9	795,7	558,3	1 064,4	950,0	711,2	--- --- -	1 088,6	11 107,9
Bear Flat -													
Bear Flat A[1]	1 469,1	1 269,6	1 357,3	1 251,9	1 369,0	1 282,1	1 352,5	1 447,2	1 419,2	1 502,0	1 453,0	1 519,4	16 784,3
Beatton River -													
Halfway A[1]	86,9	79,9	67,5	77,7	81,7	49,3	84,7	108,6	101,7	111,6	93,7	111,5	1 073,0
Halfway B[1]	--- --- -	--- --- -	--- --- -	--- --- -	--- --- -	41,9	--- --- -	--- --- -	--- --- -	--- --- -	--- --- -	- --- --- -	41,9
Halfway C[1]	51,3	48,4	56,3	51,4	28,3	55,1	33,5	61,3	51,5	24,4	38,3	30,0	542,8
Halfway D[1]	175,7	142,0	171,8	125,9	200,0	138,3	115,4	147,0	137,3	210,9	160,2	149,8	1 884,1
Totals	319,9	270,3	315,6	261,0	310,0	285,8	253,6	316,9	290,5	346,9	302,2	291,1	3 543,8
Beatton River West -													
Bluesky A[1]	166,1	163,9	181,2	161,7	157,9	144,3	119,7	168,1	160,2	139,3	125,6	116,3	1 819,5
Beaverdam -													
Upper Halfway A	1 152,9	1 140,0	1 014,9	1 200,8	992,0	1 136,2	1 457,0	1 392,0	1 365,1	1 389,5	1 537,3	1 599,6	15 785,5
Beavertail -													
Gething A	6 384,3	3 192,1	725,7	622,9	672,1	1 950,7	7 331,5	5 570,8	4 605,0	3 770,4	4 444,2	8 184,4	47 619,7
Halfway B[1]	15,5	10,1	10,7	9,3	7,3	1,0	13,7	11,7	9,0	12,3	9,7	9,8	134,1
Totals	6 397,8	3 202,2	736,4	631,8	679,4	1 951,7	7 345,2	5 582,5	4 614,0	3 788,7	4 453,9	8 170,2	47 753,8
Bug -													
Baldonnel B	4 593,1	2 198,4	3 517,5	207,6	--- --- -	1 642,4	5 194,6	4 827,9	2 771,7	--- --- -	3 868,7	5 118,8	33 940,7
Baldonnel C	178,9	20,4	1 698,0	1 185,2	229,0	271,4	773,2	895,9	1 097,2	81,1	584,4	1 123,7	8 136,4
Halfway A	2 673,3	4 024,0	6 711,3	2 840,6	2 728,2	1 113,3	6 096,2	7 933,9	5 906,7	2 725,1	7 370,0	8 792,4	59 515,6
Totals	7 445,3	6 242,8	11 926,8	4 233,4	2 953,2	3 027,1	12 064,0	13 657,7	9 779,6	2 806,2	11 823,9	15 034,9	101 590,9
Burnaby -													
Bluesky C	554,2	160,3	--- --- -	--- --- -	--- --- -	--- --- -	--- --- -	568,2	248,0	--- --- -	--- ---	431,6	1 961,2
Dunlevy A	579,8	539,7	--- --- -	--- --- -	--- --- -	365,2	1 452,4	1 352,1	672,9	--- --- -	1 484,6	1 265,4	7 712,1
Totals	1 134,0	700,0	--- --- -	--- --- -	--- --- -	365,2	1 452,4	1 920,3	921,8	--- --- -	1 484,6	1 697,0	9 673,3
Birch -													
Gething B	84,0	52,4	91,8	4,9	--- --- -	8,9	46,7	44,8	37,8	6,5	2,7	48,0	368,1
Baldonnel A	228,0	196,8	201,5	16,7	--- --- -	97,4	218,8	151,2	127,1	28,6	1,8	226,5	1 492,8
Baldonnel B	980,7	845,6	841,8	79,7	--- --- -	218,4	880,7	733,7	694,5	136,4	54,1	1 323,3	6 809,9
Baldonnel C[1]	114,3	104,8	127,0	94,9	88,4	113,3	122,6	149,0	135,3	135,5	102,6	95,8	1 383,5
Halfway A	871,4	725,4	773,7	83,0	--- --- -	234,5	661,7	805,9	542,0	113,1	119,3	830,0	5 766,0
Totals	2 258,4	1 924,2	1 995,8	279,2	86,4	630,1	1 929,7	1 941,6	1 536,7	420,1	280,5	2 523,6	15 800,3

Blueberry -													
Dunlevy A	762,4	1 100,6	1 164,8	1 141,0	1 228,9	1 100,8	1 224,0	962,5	909,3	1 085,5	1 032,8	1 029,0	12 749,4
Dunlevy B	1 418,2	1 457,3	1 379,4	174,3	66,0	160,4	137,8	76,4	1 163,4	1 491,3	1 288,6	1 336,7	10 850,0
Baldonnel B	--- --- -	--- --- -	--- --- -	--- --- -	--- --- -	--- --- -	--- --- -	--- --- -	--- --- -	389,0	284,2	240,0	873,2
Debolt A[1]	682,7	574,8	505,7	501,9	646,8	481,2	364,0	343,8	474,5	557,8	632,3	661,9	5 877,6
Debolt B[1]	942,4	2 142,0	1 977,8	1 870,4	2 093,8	1 869,9	1 388,3	1 367,1	1 764,3	1 957,7	1 683,5	1 894,1	20 771,2
Totals	3 565,7	5 282,7	5 027,5	3 777,8	4 035,8	3 632,3	3 114,1	2 749,8	4 311,5	5 421,1	4 621,4	4 741,7	50 301,2
Boundary Lake -													
Gething A	783,5	977,8	519,3	--- --- -	--- --- -	--- --- -	--- --- -	--- --- -	--- --- -	297,3	717,2	744,1	3 599,0
Baldonnel B	1 614,4	1 483,8	1 488,0	--- --- -	--- --- -	--- --- -	--- --- -	--- --- -	--- --- -	894,2	1 858,6	1 322,6	9 062,6
Baldonnel C	843,5	536,6	497,6	--- --- -	--- --- -	--- --- -	--- --- -	--- --- -	--- --- -	311,7	629,4	611,7	3 292,5
Cecil A[1]	,9	4,1	3,0	3,0	3,3	2,9	5,8	7,0	6,0	9,3	10,4	11,1	69,0
Cecil B[1]	--- --- -	--- --- -	--- --- -	--- --- -	--- --- -	--- --- -	5,6	5,2	2,4	2,6	2,7	,4	18,9
Boundary Lake A[1]	9 637,0	9 078,0	9 481,6	9 235,8	6 892,3	6 987,3	5 015,3	5 840,2	6 112,4	9 842,4	9 410,2	9 708,9	89 761,0
Basal Boundary A	172,9	150,3	162,5	--- --- -	--- --- -	--- --- -	--- --- -	--- --- -	--- --- -	76,3	188,8	178,7	909,5
Halfway A[1]	63,1	71,6	89,0	79,3	76,7	47,8	60,3	75,3	52,3	77,6	110,2	81,8	864,1
Totals	9 134,3	7 902,0	8 442,0	9 318,1	6 972,3	9 038,1	9 087,2	9 927,7	6 175,1	7 489,4	9 402,5	8 724,9	83 993,6
Boundary Lake North -													
Halfway B	2 075,8	62,7	--- --- -	--- --- -	--- --- -	350,0	1 047,6	1 123,8	1 173,9	239,8	80,2	1 367,0	7 660,9
Halfway C	848,7	598,2	693,5	612,8	298,8	583,1	584,0	581,0	578,1	612,9	463,7	687,1	6 680,9
Halfway D[1]	47,8	40,4	41,3	37,1	34,5	12,8	--- --- -	--- --- -	--- --- -	48,1	60,9	48,7	406,6
Halfway E	209,0	12,3	--- --- -	--- --- -	--- --- -	31,4	75,5	113,2	87,2	--- --- -	--- --- -	172,5	701,1
Totals	2 981,3	671,6	734,8	669,9	353,3	977,3	1 717,1	1 828,0	1 839,2	892,9	544,8	2 446,3	15 656,5
Bubbles -													
Baldonnel A	760,0	5 429,9	5 613,3	--- --- -	--- --- -	--- --- -	--- --- -	--- --- -	--- --- -	--- --- -	285,7	7 328,7	19 417,6
Bubbles North -													
Baldonnel A	--- --- -	2 176,3	766,7	--- --- -	--- --- -	508,4	2 117,4	--- --- -	--- --- -	1 752,5	283,1	2 314,4	9 918,8
Halfway A	--- --- -	--- --- -	142,7	85,1	--- --- -	--- --- -	--- --- -	--- --- -	--- --- -	--- --- -	--- --- -	--- --- -	227,8
Totals	--- --- -	2 176,3	909,4	85,1	--- --- -	508,4	2 117,4	--- --- -	--- --- -	1 752,5	283,1	2 314,4	10 146,6
Buick Creek -													
Bluesky A	395,1	375,0	190,6	68,1	--- --- -	137,2	1 048,9	1 058,1	662,5	109,9	199,5	699,4	4 944,3
Bluesky C	3 512,1	840,9	176,3	178,5	117,6	564,6	1 106,1	2 726,2	356,1	1 419,3	3 060,8	3 095,6	16 936,1
Bluesky D	316,6	114,1	--- --- -	--- --- -	--- --- -	--- --- -	154,8	302,2	117,4	97,4	168,9	227,8	1 499,2
Gething A	131,3	115,1	111,5	--- --- -	--- --- -	95,7	183,4	109,0	56,4	--- --- -	--- --- -	233,3	1 033,7
Dunlevy A	7 272,9	1 877,1	448,8	14,2	--- --- -	630,2	4 359,1	6 869,5	2 282,2	2 486,4	6 117,7	6 947,2	39 305,3
Dunlevy A[1]	--- --- -	--- --- -	--- --- -	--- --- -	--- --- -	,7	3,9	2,7	3,3	4,9	2,0	--- --- -	17,5
Dunlevy B	6 489,2	4 215,3	2 923,5	1 099,3	918,5	1 811,1	3 341,3	3 3?1,0	2 531,3	885,5	2 224,5	6 787,4	36 577,7
Dunlevy C	5 034,1	2 519,6	849,4	84,4	119,5	382,9	3 188,2	4 817,6	2 735,7	1 700,8	4 907,9	5 696,8	32 034,9
Dunlevy G	199,4	153,9	75,3	--- --- -	--- --- -	33,3	168,2	105,6	105,7	97,2	,1	51,5	990,2
Dunlevy H	1 555,5	2 326,3	2 084,5	2 164,7	2 136,3	2 052,1	1 096,9	917,1	1 414,4	1 109,8	1 412,5	2 663,7	20 933,8
Dunlevy I	1 316,0	65,2	--- --- -	--- --- -	--- --- -	266,1	1 355,9	1 286,5	947,0	339,6	174,3	2 427,5	8 176,1
Dunlevy K	2 079,1	857,0	--- --- -	--- --- -	--- --- -	491,1	2 157,3	2 127,6	1 467,5	391,0	209,4	2 249,4	12 029,4
Dolg A[1]	96,3	94,0	106,2	102,0	88,9	98,2	108,6	118,0	113,5	115,0	120,9	124,4	1 286,0
Dolg B[1]	2 875,7	2 582,2	2 808,1	1 187,7	2 002,3	1 886,6	2 783,2	2 489,2	2 186,5	2 322,4	2 174,9	2 157,6	27 456,4
Totals	31 075,3	16 131,7	9 774,0	4 898,9	5 383,1	8 469,8	21 055,8	26 260,3	14 979,5	11 079,2	20 773,4	35 321,6	203 220,6
Buick Creek North -													
Bluesky A	3 686,5	1 130,3	490,3	--- --- -	--- --- -	705,6	3 560,1	3 627,4	2 352,2	2 373,1	3 226,3	3 263,6	24 615,4
Dunlevy A	1 173,1	356,3	354,3	--- --- -	--- --- -	196,2	835,0	1 075,5	686,7	472,6	427,4	1 144,4	6 721,5
Dunlevy B	646,6	408,1	417,2	,5	--- --- -	198,3	551,0	865,7	484,0	692,8	622,6	623,1	5 509,9
Totals	5 506,2	1 894,7	1 261,8	,5	--- --- -	1 100,1	4 946,1	5 568,6	3 722,9	3 538,5	4 276,3	5 031,1	36 846,8

[1] Associated Gas

Table P10 - Monthly Non-associated and Associated Gas Production by Fields and Pools - Continued

(Volumes in 10^3m^3 at 101.325 kPa and 15°C)

	January	February	March	April	May	June	July	August	September	October	November	December	Totals
Bulch Creek West -													
Bluesky A	4 372,0	2 125,3	1 290,2	119,7	--- --- -	788,3	5 624,6	4 254,6	2 665,7	1 652,4	3 908,9	4 452,9	29 252,6
Bluesky C	390,4	250,0	198,0	19,2	--- --- -	28,7	285,7	339,7	243,5	227,2	180,9	334,2	2 503,5
Gething A[1]	--- --- -	--- --- -	--- --- -	--- --- -	--- --- -	2,0	11,7	20,5	22,3	58,1	57,6	58,0	170,2
Dunlevy A	492,9	253,0	752,6	--- --- -	--- --- -	--- --- -	318,5	720,7	686,4	505,0	528,5	594,6	4 652,2
Dunlevy B	2 443,2	2 116,3	1 902,9	--- --- -	--- --- -	443,6	2 698,1	2 769,7	3 509,3	4 043,3	3 279,6	3 223,0	26 429,0
Dunlevy D[1]	12,3	26,6	50,2	30,8	10,4	35,7	4,4	,1	4,1	2,2	,7	,9	178,4
Baldonnel A	90,9	80,2	78,2	44,5	57,7	85,4	--- --- -	--- --- -	--- --- -	--- --- -	--- --- -	63,2	480,1
Halfway A	618,1	1 098,9	1 282,9	50,4	--- --- -	73,5	1 035,2	1 749,6	783,3	1 880,9	1 777,4	908,8	11 257,0
Totals	8 425,8	5 948,3	5 555,0	264,6	68,1	1 437,2	7 978,2	9 854,9	7 914,6	8 349,1	9 513,6	9 613,6	74 923,0
Bullmoose -													
Baldonnel A	20 449,0	19 858,4	16 522,4	22 925,9	--- --- -	--- --- -	--- --- -	--- --- -	17 892,9	32 422,4	36 316,5	32 436,5	200 826,0
Bulrush -													
Halfway A[1]	1 750,2	1 558,4	1 765,1	1 808,3	1 928,5	1 766,3	1 466,1	2 008,6	2 031,3	2 318,1	2 012,5	2 252,2	22 665,4
Halfway B[1]	74,0	74,4	85,8	34,7	105,0	75,1	85,2	55,8	51,1	56,4	1,9	119,3	818,7
Totals	1 824,2	1 632,8	1 850,9	1 843,0	2 033,5	1 841,4	1 551,3	2 064,4	2 082,4	2 374,5	2 014,2	2 371,5	23 484,1
Bulrush East -													
Halfway A[1]	--- --- -	--- --- -	--- --- -	--- --- -	--- --- -	--- --- -	--- --- -	--- --- -	29,2	--- --- -	54,7	101,6	181,5
Cabin -													
Slave Point B	4 630,1	1 555,8	1 670,5	2 224,0	2 658,5	1 934,6	--- --- -	--- --- -	--- --- -	566,5	1 825,1	2 543,4	19 568,5
Slave Point C	637,7	18,6	75,3	248,4	--- --- -	--- --- -	--- --- -	--- --- -	--- --- -	--- --- -	279,0	451,8	1 710,8
Slave Point D	1 935,5	1 778,2	1 694,5	81,2	--- --- -	--- --- -	--- --- -	--- --- -	--- --- -	882,7	2 212,7	2 922,2	11 507,0
Slave Point E	2 793,1	4 442,9	5 811,2	5 475,6	9 479,0	2 102,1	--- --- -	--- --- -	--- --- -	--- --- -	884,6	1 896,2	30 884,7
Totals	9 996,4	7 775,5	7 251,5	8 029,2	12 137,5	4 036,7	--- --- -	--- --- -	--- --- -	1 449,2	5 201,4	7 813,6	63 691,0
Cache Creek -													
Coplin A	398,7	2 145,1	81,0	--- --- -	756,2	1 401,0	2 413,2	2 227,2	1 607,5	951,7	675,6	2 828,6	15 485,8
Halfway A	413,9	3 213,4	711,6	--- --- -	1 328,0	2 111,4	7 618,4	8 066,3	4 926,2	4 480,0	3 397,4	7 156,6	43 483,2
Totals	812,6	5 358,5	792,6	--- --- -	2 084,2	3 572,4	10 031,6	10 293,5	6 533,7	5 431,7	4 073,0	9 985,2	58 969,0
Cecil Lake -													
Siphon A[1]	14,1	10,9	12,9	19,6	21,2	18,5	9,4	9,9	8,9	4,8	5,6	6,0	143,4
Cecil A[1]	106,9	123,8	152,3	119,6	69,4	98,5	59,1	70,9	98,8	94,6	72,3	78,6	1 146,8
Cecil B[1]	--- --- -	--- --- -	--- --- -	--- --- -	--- --- -	--- --- -	--- --- -	1,5	257,7	321,3	164,3	57,3	802,1
Cecil C[1]	--- --- -	--- --- -	--- --- -	96,4	70,3	38,9	59,1	47,8	32,2	44,8	36,7	54,0	480,0
North Pine A	2 477,7	2 108,6	1 704,2	2 601,6	2 619,1	2 293,4	2 528,8	2 504,6	2 524,9	2 711,6	2 409,5	2 492,9	28 776,9
North Pine A[1]	902,0	988,5	783,6	1 201,4	809,5	883,5	585,3	611,9	1 032,2	797,7	650,0	792,1	10 237,7
North Pine B[1]	--- --- -	--- --- -	--- --- -	--- --- -	--- --- -	--- --- -	--- --- -	3,3	10,0	19,5	74,2	3,7	110,7
North Pine C[1]	327,0	307,0	366,9	405,1	379,5	318,0	217,4	316,5	379,8	346,6	291,9	350,6	3 906,3
Totals	3 829,7	3 538,8	3 019,9	4 443,7	3 869,0	3 650,8	3 259,1	3 765,8	4 344,5	4 340,9	3 704,5	3 837,2	45 603,9
Clarke Lake -													
Slave Point A	52 646,2	75 241,6	82 649,4	45 166,6	44 751,5	43 221,7	--- --- -	--- --- -	46 225,0	77 484,3	75 766,8	88 936,5	632 089,4
Commotion -													
Baldonnel A	5 685,5	4 161,6	781,4	716,6	--- --- -	--- --- -	--- --- -	--- --- -	5 300,5	6 220,4	1 761,7	4 001,0	28 628,7

Crush -													
Halfway A[1]	283.0	257.7	267.0	266.6	229.0	277.6	256.0	245.6	283.2	290.0	243.8	240.6	3 140.1
Currant -													
Halfway[1]	984.8	883.7	953.9	871.2	917.0	[illegible]	687.7	839.7	939.7	789.0	906.4	1 033.1	10 764.0
Currant West -													
Halfway A	1 147.6	1 169.5	1 403.1	106.1	--- --- -	14.3	--- --- -	23.1	--- --- -	1 023.1	1 041.7	303.3	6 251.8
Dahl -													
Bluesky A	16 287.1	6 316.0	1 297.1	--- --- -	--- --- -	3 314.9	20 119.1	20 193.8	13 107.8	1 477.3	3 441.9	20 383.0	105 900.0
Dua													
Nabanun A	924.7	840.9	944.9	928.5	208.0	126.0	617.1	538.1	393.3	1 312.5	755.9	963.0	8 552.9
Drake -													
Halfway B[1]	50.4	84.7	27.1	8.9	34.0	79.8	58.6	80.7	87.2	88.8	36.2	82.0	709.4
Eagle -													
Siphon A[1]	4.9	4.6	3.2	2.7	1.9	2.5	2.7	3.5	4.4	2.9	2.7	1.5	37.5
Belloy B[1]	476.3	601.6	562.4	591.6	503.5	712.6	768.9	985.2	953.0	989.9	891.8	995.6	9 032.4
Totals	481.2	606.2	565.6	594.3	505.4	715.1	771.6	988.7	957.4	992.8	894.5	997.1	9 069.9
Eagle West -													
Cecil A	583.1	325.6	392.9	504.3	417.0	373.9	--- --- -	--- --- -	--- --- -	--- --- -	--- --- -	320.8	2 920.6
Belloy A[1]	4 182.1	4 392.1	4 777.6	4 630.0	5 056.2	4 324.1	4 514.8	5 131.9	4 810.8	4 886.9	4 279.7	5 247.1	54 233.3
Confidential	--- --- -	--- --- -	--- --- -	--- --- -	--- --- -	--- --- -	--- --- -	--- --- -	--- --- -	--- --- -	--- --- -	1.0	1.0
Totals	4 765.2	4 717.7	5 175.5	5 134.3	5 473.2	4 698.0	4 514.8	5 131.9	4 810.8	4 886.9	4 279.7	5 568.9	57 154.9
Ekwan													
Slave Point B	--- --- -	--- --- -	207.5	588.5	--- --- -	--- --- -	--- --- -	--- --- -	--- --- -	463.1	2 543.4	2 525.3	6 325.8
Firewood -													
Bluesky A	1 920.9	1 308.0	912.9	--- --- -	--- --- -	713.5	2 926.8	3 116.0	1 660.4	119.9	126.8	2 677.9	15 483.1
Dunlevy A	2 134.9	4 208.4	2 031.3	46.7	270.7	901.6	3 403.0	3 399.5	1 645.3	--- --- -	2 081.2	3 703.9	25 426.5
Dunlevy B	1 918.3	1 175.5	570.0	--- --- -	--- --- -	270.6	2 242.2	2 342.4	2 043.9	180.8	--- --- -	3 046.1	13 789.8
Dunlevy D	322.2	897.3	--- --- -	--- --- -	--- --- -	651.4	3 002.6	3 113.4	1 936.6	420.4	2 008.5	4 053.6	16 604.0
Dunlevy D[1]	--- --- -	--- --- -	--- --- -	--- --- -	2.9	9.1	13.9	2.8	5.6	1.4	9.4	3.2	47.9
Dunlevy H	1 436.0	1 025.4	1 172.6	75.8	--- --- -	241.0	1 148.2	1 192.9	552.3	--- --- -	--- --- -	865.1	7 709.3
Baldonnel A	226.9	153.3	23.4	--- --- -	--- --- -	--- --- -	--- --- -	--- --- -	--- --- -	--- --- -	--- --- -	290.3	693.9
Totals	7 959.2	8 767.9	4 710.2	122.5	273.2	2 387.2	12 736.7	13 167.0	7 844.1	722.5	4 225.9	14 840.1	77 754.5
Flatrock -													
Siphon A	1 647.9	1 802.8	2 192.1	312.9	--- --- -	--- --- -	--- --- -	--- --- -	195.0	2 296.6	1 287.8	972.4	10 709.5
Siphon B	12.4	43.0	32.1	--- --- -	--- --- -	--- --- -	--- --- -	--- --- -	--- --- -	--- --- -	--- --- -	--- --- -	87.5
Boundary Lake A[1]	14.2	14.7	20.9	9.0	17.8	17.3	11.9	15.3	14.1	13.6	11.5	15.4	175.7
Boundary Lake B[1]	93.0	84.4	96.3	97.6	98.2	85.8	99.6	101.2	95.5	96.1	84.7	90.2	1 122.6
Halfway A	322.0	201.1	442.1	80.1	--- --- -	40.6	469.4	364.2	278.4	--- --- -	--- --- -	301.1	2 508.0
Halfway B	288.9	220.7	--- --- -	--- --- -	--- --- -	15.8	--- --- -	--- --- -	--- --- -	--- --- -	--- --- -	--- --- -	525.4
Halfway E	1 032.1	1 546.0	403.8	195.7	--- --- -	227.1	1 136.3	889.9	919.2	113.2	799.6	793.7	8 056.6
Halfway E[1]	551.9	274.3	668.4	279.2	370.0	--- --- -	487.8	437.7	497.9	231.0	273.9	295.8	4 365.9
Halfway G	1 029.5	665.9	--- --- -	--- --- -	--- --- -	319.0	1 956.9	2 188.1	771.5	--- --- -	--- --- -	2 096.3	9 027.4
Totals	4 991.9	4 852.9	3 855.7	974.5	486.0	714.6	4 161.9	3 996.4	2 771.6	2 752.5	2 457.5	4 563.1	36 578.6
Flatrock West -													
Halfway A	1 096.1	--- --- -	454.6	172.4	--- --- -	288.4	693.0	796.9	1 056.5	757.2	279.8	518.5	6 115.4
Halfway B	808.9	458.3	806.3	345.6	--- --- -	465.0	807.4	776.6	702.5	93.7	--- --- -	585.5	6 049.8
Totals	1 905.0	458.3	1 260.9	518.0	--- --- -	753.4	1 500.4	1 573.5	1 759.0	850.9	279.8	1 104.0	12 165.2

[1] Associated Gas

Table P10 - Monthly Non-associated and Associated Gas Production by Fields and Pools - Continued

(Volumes in 10^3m^3 at 101.325 kPa and 15°C)

	January	February	March	April	May	June	July	August	September	October	November	December	Totals
Fort St. John -													
Baldonnel A	2 416,0	2 225,5	--- --- -	1 510,3	11,5	--- --- -	1 177,9	1 429,1	983,0	1 616,3	1 332,2	2 593,6	15 295,2
Charlie Lake A[1]	604,0	600,7	261,9	339,8	111,0	103,6	274,5	163,3	141,4	261,2	311,5	620,3	3 793,2
Halfway A	634,0	548,9	--- --- -	396,4	--- --- -	--- --- -	285,1	295,3	213,7	349,2	401,9	554,4	3 678,9
Halfway C	921,1	787,8	1 400,3	3 003,1	2 559,7	2 541,3	226,0	--- --- -	139,4	910,3	892,0	1 416,1	14 797,1
Belloy A	888,2	737,1	--- --- -	521,8	--- --- -	--- --- -	237,2	495,6	278,9	640,4	428,4	803,9	5 031,5
Totals	5 463,3	4 900,0	1 662,2	5 771,4	2 682,0	2 644,9	2 200,7	2 383,3	1 756,4	3 777,4	3 366,0	5 988,3	42 595,9
Fort St. John Southeast -													
Baldonnel A	1 293,0	1 074,6	173,4	606,0	--- --- -	--- --- -	--- --- -	--- --- -	--- --- -	--- --- -	385,7	1 047,9	4 580,6
Halfway A	1 619,1	1 308,2	203,2	836,1	--- --- -	--- --- -	--- --- -	--- --- -	--- --- -	--- --- -	999,0	1 680,0	6 245,6
Belloy A	2 524,4	2 048,1	304,1	1 289,7	--- --- -	--- --- -	--- --- -	--- --- -	--- --- -	--- --- -	784,7	2 412,6	9 363,6
Totals	5 436,5	4 430,9	680,7	2 731,8	--- --- -	--- --- -	--- --- -	--- --- -	--- --- -	--- --- -	1 769,4	5 140,5	20 189,8
Gopher -													
Halfway A	400,0	416,8	22,0	--- --- -	--- --- -	--- --- -	--- --- -	--- --- -	--- --- -	--- --- -	--- --- -	304,0	1 142,8
Gote -													
Sulphur Point A	3 600,3	2 997,5	3 666,4	3 477,3	3 210,5	1 849,3	--- --- -	--- --- -	--- --- -	1 733,0	4 427,1	6 018,4	30 979,8
Graham -													
Gething A	94,2	25,1	,6	--- --- -	--- --- -	--- --- -	--- --- -	--- --- -	--- --- -	--- --- -	--- --- -	--- --- -	119,9
Dunlevy A	86,1	72,1	3,1	--- --- -	--- --- -	--- --- -	--- --- -	--- --- -	--- --- -	--- --- -	--- --- -	--- --- -	161,3
Debolt B	35,9	33,4	1,1	--- --- -	--- --- -	--- --- -	--- --- -	--- --- -	--- --- -	--- --- -	--- --- -	--- --- -	70,4
Totals	216,2	130,6	4,8	--- --- -	--- --- -	--- --- -	--- --- -	--- --- -	--- --- -	--- --- -	--- --- -	--- --- -	351,6
Grizzly North -													
Dunlevy A	7 008,4	5 939,6	6 007,7	1 430,5	809,4	154,9	99,0	5 719,9	1 476,4	7 649,7	7 027,6	4 586,3	47 909,4
Baldonnel A	5 558,6	4 450,7	5 311,0	2 079,1	--- --- -	--- --- -	--- --- -	--- --- -	5 672,9	5 377,4	4 704,0	4 440,7	37 583,4
Halfway A	--- --- -	1 245,0	9 305,5	3 867,6	--- --- -	--- --- -	--- --- -	--- --- -	360,6	5 959,9	6 473,3	2 049,6	29 257,5
Totals	12 567,0	11 624,3	20 624,2	7 377,2	809,4	154,9	99,0	5 719,9	7 509,9	18 987,0	18 204,9	11 072,6	114 750,3
Grizzly South -													
Dunlevy A	3 820,3	4 130,8	3 379,3	1 346,3	618,6	--- --- -	--- --- -	3 844,7	1 047,0	6 555,8	5 425,3	3 349,5	33 517,8
Gundy Creek -													
Dunlevy A	45,2	44,4	151,4	3,2	--- --- -	--- --- -	32,1	29,6	46,6	12,3	54,0	57,5	476,3
Baldonnel A	41,0	58,1	47,3	7,8	--- --- -	--- --- -	--- --- -	--- --- -	--- --- -	--- --- -	--- --- -	--- --- -	154,2
Baldonnel B	785,4	687,5	675,4	106,3	--- --- -	67,4	724,9	418,0	694,0	173,1	728,0	783,0	5 843,0
Totals	871,6	790,0	874,1	119,3	--- --- -	67,4	757,0	447,6	740,6	185,4	782,0	840,5	6 475,5
Gundy Creek West -													
Dunlevy A	1 256,8	892,6	1 429,3	91,7	--- --- -	156,1	1 252,0	788,0	973,2	253,4	1 281,9	1 310,6	9 866,0
Baldonnel A	428,8	898,7	688,9	115,5	--- --- -	40,5	90,5	--- --- -	308,3	--- --- -	234,3	282,8	3 088,3
Totals	1 685,6	1 791,3	2 118,2	207,2	--- --- -	198,6	1 342,5	788,0	1 281,5	253,4	1 516,2	1 793,4	12 954,3
Helmut -													
Jean Marie A	1 062,4	429,9	--- --- -	--- --- -	--- --- -	--- --- -	--- --- -	--- --- -	--- --- -	--- --- -	--- --- -	--- --- -	1 492,3
Slave Point A	22 756,1	20 302,7	28 638,2	25 696,0	22 974,8	11 916,0	--- --- -	--- --- -	9 827,1	19 172,4	20 662,8	36 510,0	218 656,1
Slave Point B	1 438,8	1 355,6	1 550,6	403,4	--- --- -	--- --- -	--- --- -	--- --- -	--- --- -	748,8	990,0	1 642,5	8 127,7
Slave Point C	13,1	1 208,8	1 874,6	2 130,2	738,7	--- --- -	--- --- -	--- --- -	--- --- -	986,0	474,2	796,8	8 240,4
Totals	23 270,4	23 293,0	32 063,4	28 229,6	23 713,5	11 916,0	--- --- -	--- --- -	9 827,1	20 905,2	22 127,0	38 949,3	236 516,5

Helmet North -													
Jean Marie A	1 407,3	2 474,8	2 167,4	656,6	---	---	---	---	---	---	1 358,5	2 415,3	10 479,9
Highway -													
Halfway A	---	---	---	---	---	---	---	---	---	---	---	1 230,8	1 230,8
Halfway B	---	---	---	---	---	---	---	---	---	---	---	925,6	925,6
Totals	---	---	---	---	---	---	---	---	---	---	---	2 156,4	2 156,4
Hoffard -													
Slave Point A	936,1	660,3	387,8	91,4	---	---	---	---	---	---	470,2	1 354,6	3 902,4
Inga -													
Gething A	145,6	125,1	168,4	112,4	97,4	111,3	119,8	200,9	156,1	118,1	105,9	101,9	1 562,9
Dunlevy A	1 598,6	2 139,8	1 094,7	56,3	---	82,7	1 318,7	1 379,4	648,7	---	1 289,5	1 789,5	11 397,9
Coplin A	1 419,5	535,3	---	---	---	342,9	1 453,9	1 454,1	671,0	---	1 239,8	1 415,9	8 532,4
Inga A	7 629,0	2 430,6	---	---	---	1 728,6	14 466,4	14 239,3	8 151,5	4 910,4	9 800,2	11 923,5	75 279,5
Inga A[1]	3 569,3	3 081,7	3 151,1	2 863,1	2 798,5	2 953,1	3 136,3	3 087,9	2 975,5	3 143,2	2 881,3	2 894,5	36 535,5
Inga B[1]	16,1	26,5	34,1	31,1	14,3	25,0	32,2	42,5	63,5	40,5	68,3	52,0	446,1
Totals	14 378,1	8 339,0	4 448,3	3 062,9	2 910,2	5 243,6	20 527,3	20 404,1	12 666,3	8 212,2	15 385,0	18 177,3	133 754,3
Jedney -													
Baldonnel A	8 672,7	2 913,1	7 185,8	6 154,0	3 218,8	4 491,5	12 993,2	9 949,4	11 564,7	16 580,2	11 425,0	17 009,9	112 156,3
Halfway A	6 130,7	1 966,6	3 601,0	2 860,0	1 220,6	1 034,8	6 648,3	5 002,0	5 967,3	10 808,6	7 596,0	10 078,8	62 914,7
Totals	14 803,4	4 879,7	10 786,8	9 014,0	4 439,4	5 526,3	19 641,5	14 951,4	17 532,0	27 388,8	19 019,0	27 088,7	175 071,0
Julienne Creek -													
Baldonnel A	---	522,3	173,2	166,3	---	---	---	---	---	257,4	6,5	22,0	1 147,7
Halfway A	72,6	648,4	336,5	---	---	---	---	---	---	---	794,6	765,6	2 617,7
Totals	72,6	1 170,7	509,7	166,3	---	---	---	---	---	257,4	801,1	787,6	3 765,4
Julienne Creek North -													
Debolt A	573,4	372,6	139,0	74,4	---	137,3	579,2	511,6	254,8	---	916,6	498,8	3 657,7
Julienne Creek South -													
Debolt A	271,7	250,7	221,0	17,8	---	82,5	---	346,6	215,0	8,6	473,0	288,4	2 175,3
Debolt B	57,5	58,9	54,1	4,9	---	---	67,4	14,2	---	---	---	---	257,0
Totals	329,2	309,6	275,1	22,7	---	82,5	67,4	360,8	215,0	8,6	473,0	288,4	2 432,3
Junior -													
Slave Point A	---	---	221,9	1 213,0	---	---	---	---	---	1 410,5	9 198,0	8 193,0	20 236,4
Slave Point D	---	---	---	323,0	---	---	---	---	---	189,3	188,9	150,1	851,3
Totals	---	---	221,9	1 536,0	---	---	---	---	---	1 599,8	9 386,9	8 343,1	21 087,7
Klua -													
Debolt A	34,5	28,4	29,7	4,1	---	---	---	---	---	36,2	25,1	32,4	190,4
Slave Point B	4 111,1	3 621,8	4 170,9	4 060,0	269,8	---	---	---	---	3 621,3	4 632,0	5 109,5	29 596,4
Slave Point D	4 655,5	4 345,0	4 490,8	603,1	---	---	---	---	---	4 969,6	5 427,8	5 773,8	30 265,6
Slave Point E	723,2	483,8	572,5	74,8	---	---	---	---	---	536,3	547,1	2 937,7
Pine Point A	5 392,9	4 779,2	3 015,7	741,2	---	---	---	---	---	---	---	2 133,5	16 062,5
Pine Point B	6 533,4	5 750,4	5 104,6	695,7	---	---	---	---	---	5 478,9	5 768,7	4 274,9	33 606,6
Totals	21 450,6	19 008,6	17 384,2	6 178,9	269,8	---	---	---	---	14 106,0	16 389,9	17 871,2	112 659,2

[1] Associated Gas

Table P10 - Monthly Non-associated and Associated Gas Production by Fields and Pools - Continued

(Volumes in 10^3m^3 at 101.325 kPa and 15°C)

	January	February	March	April	May	June	July	August	September	October	November	December	Totals
Kobes -													
Dunlevy A	108.9	219.1	196.2	19.9	---	55.2	426.8	739.8	567.7	445.7	169.1	271.4	3 219.8
Charlie Lake A	---	155.1	---	---	---	91.2	365.2	904.2	819.9	831.0	24.0	---	3 150.6
Charlie Lake B	39.1	54.4	---	---	---	239.3	1 222.9	822.3	597.6	818.7	419.7	839.0	5 053.0
Charlie Lake D	---	---	---	---	---	26.9	181.7	186.1	151.9	163.3	62.4	87.6	859.9
Charlie Lake E	304.1	253.4	---	---	---	14.8	668.6	753.9	512.0	199.2	64.7	979.5	3 750.2
Halfway A	1 195.0	933.9	507.8	---	---	1 483.1	9 039.6	8 758.3	7 200.1	7 040.1	6 250.9	7 547.2	49 956.0
Debolt A	15.8	---	---	---	---	48.2	283.6	313.2	196.8	498.2	721.2	340.0	2 417.0
Totals	1 662.9	1 615.9	704.0	19.9	---	1 918.7	12 188.4	12 477.8	10 046.0	9 996.2	7 712.0	10 064.7	68 406.5
Kobes West -													
Inga A	1 259.4	708.0	378.9	---	---	355.0	1 180.2	999.5	466.0	---	115.0	1 157.6	6 599.6
Katcho Lake -													
Slave Point A	2 744.6	2 473.9	2 137.0	2 328.3	3 644.4	2 381.2	---	---	---	---	---	---	15 709.4
Slave Point C	---	859.3	462.2	383.4	589.3	---	---	---	---	---	---	---	2 294.2
Totals	2 744.6	3 333.2	2 599.2	2 711.7	4 233.7	2 381.2	---	---	---	---	---	---	18 003.6
Katcho Lake East -													
Bluesky B	---	---	90.1	---	218.9	5.3	---	---	---	17.1	20.7	27.2	379.3
Slave Point B	1 539.0	1 404.6	409.9	---	---	---	---	---	---	---	674.5	2 025.6	6 053.6
Slave Point C	5 859.4	8 117.7	7 105.7	7 300.0	6 838.0	4 303.4	---	---	---	10 911.6	4 833.7	10 963.1	66 232.6
Totals	7 398.4	9 522.3	7 605.7	7 300.0	7 056.9	4 308.7	---	---	---	10 928.7	5 528.9	13 015.9	72 665.5
Laprise -													
Gething A	222.6	130.1	---	---	---	28.3	241.5	244.2	---	---	78.2	170.0	1 114.9
Baldonnel A	24 639.2	15 801.7	1 394.5	1 539.5	1 069.7	4 880.6	36 530.3	22 903.5	15 485.5	12 564.6	16 969.4	43 868.5	195 648.0
Baldonnel B	480.1	1 708.1	1 718.3	2 504.4	---	1 553.3	15 572.5	10 528.2	7 445.2	4 544.8	7 652.7	13 088.0	66 805.6
Nancy A	61.5	216.3	---	---	---	---	340.5	274.9	127.0	89.9	256.4	241.8	1 608.3
Totals	25 403.4	15 856.2	3 112.8	4 043.9	1 069.7	6 462.2	52 684.8	33 960.8	23 057.7	17 199.3	24 956.7	57 369.3	265 176.8
Laprise Creek West -													
Baldonnel A	65.9	320.4	---	---	---	---	---	---	---	---	---	---	386.3
Louise -													
Slave Point A	711.2	1 749.5	2 557.3	1 643.7	958.2	712.0	---	---	---	---	672.5	1 972.9	10 977.3
Mica -													
Mica A[1]	148.9	163.9	152.6	138.4	43.1	115.2	84.2	146.7	207.7	210.2	172.2	136.0	1 719.1
North Pine A[1]	35.4	23.0	45.2	26.5	20.0	28.9	25.2	88.4	7.0	47.7	20.0	41.6	409.9
Totals	184.3	186.9	197.8	164.9	63.1	144.1	109.4	235.1	214.7	258.9	192.2	177.6	2 129.0
Mike -													
Gething A[1]	391.1	363.6	448.2	58.1	---	---	---	---	---	---	---	238.2	1 499.2
Milligan Creek -													
Gething A[1]	---	---	---	---	---	---	---	---	---	---	144.4	---	144.4
Gething A	78.5	82.8	78.0	76.4	76.4	93.9	116.2	101.6	92.9	85.9	70.6	75.8	1 029.0
Gething B	---	---	---	---	---	---	---	---	---	---	---	---	19.7
Gething B[1]	66.2	51.3	52.0	61.6	45.0	58.0	78.4	51.3	61.6	60.0	103.8	34.5	725.7
Halfway A[1]	1 882.4	1 794.8	2 219.0	2 006.7	1 644.8	2 347.3	2 356.9	1 932.1	1 822.0	1 910.6	1 441.7	1 718.0	23 076.3
Totals	2 029.1	1 928.9	2 368.7	2 144.7	1 766.2	2 499.2	2 551.5	2 085.0	1 976.5	2 056.5	1 760.5	1 828.3	24 995.1

Milligan Creek West -													
Halfway A	605.7	501.0	458.0	48.5	--- --- -	50.0	289.1	5.6	439.0	200.5	--- --- -	200.0	2 817.2
Monias -													
Halfway A	30 667.9	16 640.4	6 618.7	20 151.3	14 666.8	14 156.2	16 202.1	10 187.2	23 169.1	6 795.5	7 093.6	26 198.1	192 546.9
Halfway B	1 714.4	--- --- -	--- --- -	--- --- -	--- --- -	418.4	2 161.0	1 553.7	1 019.6	286.5	160.4	1 817.2	9 131.2
Totals	32 382.3	16 640.4	6 618.7	20 151.3	14 666.8	14 574.6	18 363.1	11 740.9	24 188.7	7 082.0	7 254.0	28 015.3	201 678.1
Nettle -													
Gething A[1]	929.7	918.1	1 010.0	--- --- -	--- --- -	--- --- -	--- --- -	--- --- -	--- --- -	--- --- -	--- --- -	506.8	3 564.6
Siphon A	535.4	16.4	71.4	147.8	--- --- -	--- --- -	--- --- -	--- --- -	--- --- -	--- --- -	--- --- -	920.0	1 689.0
Halfway A	--- --- -	--- --- -	149.2	199.6	--- --- -	69.5	2 227.5	1 557.8	2 300.0	422.4	--- --- -	821.8	7 747.8
Totals	1 465.1	934.5	1 230.6	347.4	--- --- -	69.5	2 227.5	1 557.8	2 300.0	422.4	--- --- -	2 248.6	12 801.4
Nig Creek -													
Baldonnel A	11 992.9	3 886.8	9 849.7	562.6	7.6	3 925.7	17 240.9	16 927.0	10 426.3	3 297.1	12 216.4	18 008.8	108 341.8
North Pine -													
North Pine B	--- --- -	--- --- -	--- --- -	--- --- -	290.7	42.6	263.7	--- --- -	--- --- -	--- --- -	203.7	1 546.3	2 347.0
North Pine B[1]	472.5	488.1	469.3	324.1	368.5	555.7	598.7	398.0	416.2	474.5	509.7	415.0	5 490.3
Totals	472.5	488.1	469.3	324.1	659.2	598.3	862.4	398.0	416.2	474.5	713.4	1 961.3	7 837.3
Oak -													
Cecil B[1]	6.6	6.2	7.1	9.7	8.4	5.9	7.8	8.2	7.4	7.2	6.5	5.1	86.1
Halfway A	4 047.8	752.6	3 344.3	3 556.1	2 855.8	3 080.9	4 612.2	6 120.3	7 247.7	6 022.0	5 508.0	6 940.5	54 088.2
Halfway B[1]	148.2	247.2	380.8	325.7	288.2	222.6	244.2	236.4	192.0	202.3	199.6	180.6	2 867.8
Totals	4 202.6	1 006.0	3 732.2	3 891.5	3 152.4	3 309.4	4 864.2	6 364.9	7 447.1	6 231.5	5 714.1	7 126.2	57 042.1
Osprey -													
Bluesky A	1 421.6	52.6	7.9	--- --- -	--- --- -	469.8	1 289.7	1 224.0	427.8	--- --- -	553.6	1 096.2	6 543.2
Gething A	799.0	783.6	632.5	27.4	--- --- -	--- --- -	--- --- -	--- --- -	--- --- -	--- --- -	--- --- -	514.3	2 756.8
Halfway A[1]	821.6	302.9	341.1	318.2	214.2	624.5	701.3	445.5	414.8	351.9	349.1	387.8	5 272.9
Totals	3 042.2	1 139.1	981.5	345.6	214.2	1 094.3	1 991.0	1 669.5	842.6	351.9	902.7	1 998.3	14 572.9
Paradise -													
Halfway A	--- --- -	--- --- -	--- --- -	--- --- -	287.9	312.3	1.4	--- --- -	63.7	--- --- -	--- --- -	--- --- -	665.3
Parkland -													
Wabamun A	3 112.4	1 578.8	--- --- -	--- --- -	3 365.4	5 082.4	5 582.7	7 964.9	5 151.9	2 243.6	3 829.3	8 157.2	46 068.6
Peejay -													
Gething A	750.1	681.7	743.2	713.1	676.8	588.2	689.4	566.8	428.3	425.2	479.9	766.2	7 508.9
Baldonnel A	868.6	816.3	837.7	816.5	738.1	564.6	830.5	649.5	639.5	446.7	726.4	881.4	8 815.8
Halfway	898.7	782.9	852.5	839.3	759.0	559.3	838.1	652.9	651.8	436.2	636.9	836.3	8 743.9
Halfway[1]	1 002.0	975.8	1 006.3	922.2	752.6	680.3	474.7	741.6	852.9	940.0	1 112.3	1 138.4	10 599.1
Halfway A[1]	21.1	20.7	22.6	20.9	21.1	20.4	25.1	26.0	24.4	24.6	26.3	23.6	276.8
Halfway K	115.7	125.7	141.0	115.3	28.7	98.1	134.6	139.3	127.3	88.3	131.0	151.7	1 396.7
Halfway L[1]	268.0	211.9	180.8	356.7	250.2	227.4	245.3	238.6	238.6	218.8	282.1	208.8	2 907.2
Halfway M	1 028.7	709.2	540.5	26.5	397.3	779.9	903.0	845.4	778.2	90.6	--- --- -	746.2	7 041.9
Totals	4 948.9	4 324.2	4 324.6	3 810.5	3 824.0	3 518.2	4 140.7	3 860.1	3 741.0	2 670.6	3 374.9	4 750.6	47 288.3
Peejay West -													
Halfway A[1]	1 191.1	1 617.0	1 616.1	1 443.7	1 131.8	948.2	921.6	733.5	1 348.2	1 517.7	1 475.7	1 545.7	15 490.3
Petitot River -													
Slave Point A	2 883.8	110.7	--- --- -	--- --- -	--- --- -	--- --- -	--- --- -	--- --- -	--- --- -	--- --- -	--- --- -	--- --- -	2 994.5

[1] Associated Gas

Table P10 - Monthly Non-associated and Associated Gas Production by Fields and Pools - Continued

(Volumes in 10^3m^3 at 101.325 kPa and 15°C)

	January	February	March	April	May	June	July	August	September	October	November	December	Totals
Pickell -													
Halfway A	1 717.9	1 565.6	1 133.9	--- --- -	--- --- -	--- --- -	--- --- -	--- --- -	--- --- -	--- --- -	--- --- -	--- --- -	4 417.4
Red Creek -													
Halfway A	1 167.4	619.3	928.2	264.1	--- --- -	--- --- -	--- --- -	--- --- -	--- --- -	--- --- -	--- --- -	--- --- -	2 979.0
Rigel -													
Bluesky A	243.0	20.1	--- --- -	171.9	153.0	53.8	201.5	187.3	144.8	65.1	160.5	351.0	1 752.0
Dunlevy A[1]	451.9	423.7	331.1	425.2	329.6	397.4	429.5	533.0	509.7	484.9	491.7	472.6	5 280.3
Dunlevy B[1]	--- --- -	--- --- -	--- --- -	--- --- -	1.0	--- --- -	--- --- -	388.9	335.6	314.2	321.3	323.6	1 684.6
Dunlevy D	--- --- -	--- --- -	--- --- -	--- --- -	--- --- -	--- --- -	--- --- -	--- --- -	--- --- -	--- --- -	15.2	--- --- -	15.2
Dunlevy E[1]	1.6	8.8	150.9	42.4	--- --- -	138.0	64.1	393.4	350.3	17.0	378.3	380.6	1 925.4
Dunlevy F	23 789.3	3 495.6	883.7	19 438.8	18 244.9	16 472.0	13 867.9	20 006.9	19 687.1	6 254.1	26 867.6	32 814.9	201 822.8
Totals	24 485.8	3 948.2	1 365.7	20 078.3	18 728.5	17 061.2	14 563.0	21 509.5	21 027.5	7 135.3	28 234.6	34 342.7	212 480.3
Rigel East -													
Gething A	3 547.2	2 945.7	2 465.3	255.7	--- --- -	697.6	3 207.4	3 403.9	1 693.7	170.9	163.9	3 742.5	22 271.8
Roger -													
Pine Point A	22 802.5	22 401.4	17 297.8	17 905.3	15 849.7	10 584.9	--- --- -	--- --- -	5 686.5	6 165.8	9 484.5	19 007.6	147 185.8
Sahtaneh -													
Pine Point A	3 270.1	--- --- -	--- --- -	--- --- -	--- --- -	--- --- -	--- --- -	--- --- -	6 649.4	14 989.6	16 064.4	15 576.5	56 550.0
Pine Point B	12 217.3	9 070.3	8 315.1	--- --- -	--- --- -	--- --- -	--- --- -	--- --- -	8 536.7	12 769.9	15 424.1	14 424.0	80 757.4
Totals	15 487.4	9 070.3	8 315.1	--- --- -	--- --- -	--- --- -	--- --- -	--- --- -	15 186.1	27 759.5	31 488.5	30 000.5	137 307.4
Septimus -													
North Pine A[1]	6.3	6.5	10.0	8.4	--- --- -	5.7	5.6	1.6	3.6	4.0	--- --- -	--- --- -	51.7
Sierra -													
Pine Point A	50 395.2	51 000.8	52 066.2	64 943.3	45 483.2	38 351.3	--- --- -	--- --- -	65 211.6	65 594.9	118 437.9	107 823.7	659 308.1
Pine Point B	10 635.7	16 608.9	12 916.4	26 112.9	20 140.1	16 093.8	--- --- -	--- --- -	11 638.2	1 974.0	12 904.5	21 353.6	150 378.1
Pine Point C	6 341.6	8 732.2	12 347.6	19 809.5	5 313.5	4 354.3	--- --- -	--- --- -	2 551.5	22 407.5	32 864.8	25 780.5	140 503.0
Pine Point D	22 311.9	22 922.5	19 470.9	19 661.1	22 164.2	19 528.0	--- --- -	--- --- -	10 563.6	13 135.8	29 331.6	4 613.2	183 702.8
Totals	89 684.4	99 264.4	96 801.1	130 526.8	93 101.0	78 327.4	--- --- -	--- --- -	89 964.9	103 112.2	193 538.8	159 571.0	1 133 892.0
Sikanni -													
Confidential	--- --- -	--- --- -	--- --- -	--- --- -	788.5	--- --- -	--- --- -	--- --- -	--- --- -	--- --- -	--- --- -	--- --- -	788.5
Silver -													
Bluesky A	14 602.9	5 613.7	--- --- -	--- --- -	--- --- -	2 897.6	12 316.8	14 254.2	9 094.1	1 903.0	5 689.2	15 256.6	81 608.1
Bluesky B	1 265.1	--- --- -	--- --- -	--- --- -	--- --- -	255.6	1 169.7	1 235.7	931.7	279.4	--- --- -	1 041.2	6 178.4
Totals	15 868.0	5 613.7	--- --- -	--- --- -	--- --- -	3 153.2	13 486.5	15 489.9	10 025.8	2 182.4	5 689.2	16 277.8	87 786.5
Silverberry -													
North Pine A	705.1	576.8	717.3	91.7	--- --- -	84.7	836.6	892.9	898.4	169.8	--- --- -	760.1	5 735.4

Siphon -													
Dunlevy A	3 561.2	3 186.6	2 644.2	3 202.5	1 944.1	636.9	4 778.5	2 804.6	1 847.1	390.3	860.5	4 519.7	30 376.2
Dunlevy C[1]	.9	1.5	1.6	2.4	2.8	2.8	3.3	2.1	4.9	4.3	5.0	7.0	38.6
Baldonnel A	177.6	150.3	159.7	160.7	157.6	155.9	91.5	170.2	167.4	56.4	159.3	187.5	1 792.1
Siphon A	311.5	253.5	276.7	254.2	360.3	487.8	791.1	298.3	247.1	66.8	257.8	668.7	4 273.8
Halfway A	--- --- -	--- --- -	--- --- -	--- --- -	--- --- -	125.8	580.4	--- --- -	--- --- -	--- --- -	13.4	299.6	819.2
Halfway C	--- --- -	--- --- -	--- --- -	--- --- -	--- --- -	58.3	95.6	--- --- -	--- --- -	--- --- -	--- --- -	--- --- -	153.9
Totals	4 051.2	3 591.9	3 082.2	3 619.8	2 464.8	1 465.5	6 140.4	3 275.2	2 266.5	517.8	1 296.0	5 682.5	37 453.8
Siphon East													
Bluesky A	3 950.5	1 306.5	--- --- -	--- --- -	--- --- -	--- --- -	4 339.4	4 374.6	2 777.7	433.7	--- --- -	4 131.3	21 315.7
Baldonnel A	.7	9.3	--- --- -	--- --- -	--- --- -	--- --- -	--- --- -	10.4	9.3	2.5	--- --- -	15.2	47.4
Totals	3 951.2	1 315.8	--- --- -	--- --- -	--- --- -	--- --- -	4 339.4	4 385.0	2 787.0	436.2	--- --- -	4 146.5	21 361.1
Squirrel -													
North Pine A[1]	30.4	27.2	27.9	71.2	27.4	60.7	79.8	55.8	52.1	50.9	57.7	45.1	584.2
North Pine B[1]	6.6	5.6	8.6	73.1	52.8	10.9	39.2	42.6	56.1	39.1	6.7	5.6	346.9
Totals	37.0	32.8	36.5	144.3	80.2	71.6	119.0	98.4	108.2	90.0	64.4	50.7	931.1
Stoddart -													
Cecil A[1]	50.0	38.4	25.1	25.7	27.4	15.3	36.9	36.0	32.6	26.8	30.0	18.3	362.5
Cecil B[1]	8.5	--- --- -	--- --- -	--- --- -	22.1	31.8	26.1	29.1	25.6	29.2	29.5	50.1	252.0
Cecil C[1]	--- --- -	--- --- -	--- --- -	--- --- -	--- --- -	--- --- -	--- --- -	--- --- -	--- --- -	--- --- -	306.6	329.3	635.9
North Pine A	107.7	15.9	--- --- -	50.6	82.8	9.5	55.6	--- --- -	--- --- -	--- --- -	36.0	225.6	583.7
Belloy A	20 586.3	7 499.9	1 333.6	13 644.4	12 641.1	13 595.5	3 783.5	2 244.5	3 634.4	12 946.5	20 797.9	26 920.4	139 626.1
Belloy C[1]	97.6	82.7	117.5	57.2	12.0	129.9	105.1	88.1	64.2	81.9	104.9	98.8	1 039.9
Totals	20 850.1	7 636.9	1 476.2	13 777.9	12 785.4	13 780.0	4 007.2	2 397.8	3 756.8	13 084.4	21 304.9	27 642.5	142 500.1
Stoddart South -													
Belloy A[1]	101.3	95.4	206.6	54.1	19.6	105.2	184.8	119.0	82.2	91.2	57.1	59.9	1 176.4
Belloy B	34.2	246.8	89.4	30.6	25.9	207.9	397.8	509.3	449.4	490.0	428.9	495.1	3 405.3
Belloy C[1]	--- --- -	--- --- -	--- --- -	--- --- -	--- --- -	6.1	23.6	28.0	33.7	78.9	32.9	--- --- -	203.2
Totals	135.5	342.2	296.0	84.7	45.5	319.2	606.2	656.3	565.3	660.1	518.9	555.0	4 784.9
Stoddart West													
Bear Flat A[1]	395.8	356.1	379.3	142.5	28.6	379.3	352.2	386.6	381.4	340.1	285.4	311.8	3 739.1
Doig B[1]	26.6	6.9	10.7	16.1	3.6	13.9	15.9	14.9	18.7	15.9	19.4	9.3	171.9
Belloy A	3 031.9	1 744.8	2 161.9	2 169.8	2 344.4	3 046.6	2 403.7	1 497.5	2 625.3	2 013.7	1 449.1	3 962.1	28 470.8
Belloy B	--- --- -	2.9	--- --- -	--- --- -	--- --- -	--- --- -	--- --- -	--- --- -	--- --- -	--- --- -	--- --- -	--- --- -	2.9
Belloy C[1]	870.6	725.3	883.5	804.3	736.5	936.0	1 017.7	1 019.5	905.8	938.7	842.9	1 010.2	10 691.0
Belloy D	33.6	77.7	69.5	--- --- -	--- --- -	7.1	69.0	65.8	8.2	--- --- -	--- --- -	22.8	403.7
Totals	4 408.5	2 913.7	3 524.9	3 132.7	3 113.1	4 382.9	3 858.5	2 984.3	3 939.4	3 308.4	2 596.8	5 316.2	43 479.4
Sukunka -													
Baldonnel A	19 882.4	20 419.4	22 364.2	--- --- -	--- --- -	--- --- -	--- --- -	--- --- -	20 264.2	28 552.3	27 050.0	26 749.2	165 281.7
Baldonnel B	7 466.7	2 389.8	2 581.0	--- --- -	--- --- -	--- --- -	--- --- -	--- --- -	694.5	4 622.7	5 403.2	3 717.6	26 875.5
Baldonnel C	7 828.7	4 553.8	7 181.5	--- --- -	--- --- -	--- --- -	--- --- -	--- --- -	--- --- -	3 218.5	9 512.2	8 643.9	40 938.6
Totals	35 177.8	27 363.0	32 126.7	--- --- -	--- --- -	--- --- -	--- --- -	--- --- -	20 958.7	36 393.5	41 965.4	39 110.7	253 095.8
Town -													
Baldonnel A	490.6	428.6	420.0	45.9	--- --- -	137.9	517.8	303.4	269.4	388.6	292.2	275.9	3 570.3
Halfway A	1 542.4	1 329.5	453.8	40.6	--- --- -	53.4	623.8	773.7	614.1	1 308.9	1 452.7	1 436.6	9 629.5
Totals	2 033.0	1 758.1	873.8	86.5	--- --- -	191.3	1 141.6	1 077.1	883.5	1 697.5	1 744.9	1 712.5	13 199.8

[1] Associated Gas

Table P10 - Monthly Non-associated and Associated Gas Production by Fields and Pools - Continued

(Volumes in 10^3m^3 at 101.325 kPa and 15°C)

	January	February	March	April	May	June	July	August	September	October	November	December	Totals
Townsend -													
Halfway A	--- --- -	--- --- -	--- --- -	--- --- -	--- --- -	--- --- -	--- --- -	1 294,4	629,1	204,1	109,3	1 232,9	3 469,8
Debolt A	1 259,9	518,5	--- --- -	--- --- -	--- --- -	--- --- -	1 332,4	--- --- -	--- --- -	--- --- -	--- --- -	--- --- -	3 110,8
Totals	1 259,9	518,5	--- --- -	--- --- -	--- --- -	--- --- -	1 332,4	1 294,4	629,1	204,1	109,3	1 232,9	6 580,6
Tsea -													
Slave Point A	--- --- -	573,3	682,7	--- --- -	--- --- -	--- --- -	--- --- -	--- --- -	--- --- -	--- --- -	114,8	397,1	1 767,9
Slave Point B	2 719,8	2 740,4	2 950,1	2 522,5	2 933,7	1 514,4	--- --- -	--- --- -	--- --- -	--- --- -	1 783,6	3 385,6	20 550,1
Totals	2 719,8	3 313,7	3 632,8	2 522,5	2 933,7	1 514,4	--- --- -	--- --- -	--- --- -	--- --- -	1 898,4	3 782,7	22 318,0
Two Rivers													
Baldonnel A	304,2	150,5	--- --- -	--- --- -	50,0	--- --- -	--- --- -	171,9	458,7	321,2	368,4	234,4	2 059,3
Halfway A	793,4	515,6	--- --- -	1 472,0	513,4	--- --- -	--- --- -	1 078,2	1 458,3	1 293,3	1 212,7	1 452,7	9 789,6
Halfway B[1]	29,3	13,6	11,1	12,6	47,5	62,6	61,6	50,0	62,0	58,3	57,0	--- --- -	465,6
Totals	1 126,9	679,7	11,1	1 484,6	610,9	62,6	61,6	1 300,1	1 979,0	1 672,8	1 638,1	1 687,1	12 314,5
Volma -													
Gething A	5 469,9	633,7	--- --- -	--- --- -	--- --- -	1 839,1	9 187,1	8 564,9	6 004,8	5 992,1	4 545,3	8 382,5	50 819,4
"A" Marker A	1 079,1	183,5	--- --- -	--- --- -	--- --- -	300,1	2 374,3	2 162,9	1 423,8	329,5	1 327,4	1 865,5	11 046,1
Totals	6 549,0	817,2	--- --- -	--- --- -	--- --- -	2 139,2	11 561,4	10 727,8	7 428,6	6 321,6	5 872,7	10 448,0	61 861,5
Weasel -													
Baldonnel A	30,3	26,9	31,9	32,8	30,4	26,2	28,0	21,6	26,1	21,7	28,1	34,3	338,3
Halfway	2 620,4	1 604,6	1 630,3	148,8	--- --- -	--- --- -	--- --- -	--- --- -	--- --- -	--- --- -	722,9	3 441,4	10 168,4
Halfway[1]	402,7	372,2	419,1	422,7	358,7	166,5	341,4	371,1	404,5	364,9	404,8	474,4	4 503,0
Halfway B[1]	49,6	43,2	43,4	39,0	19,2	42,0	6,3	48,3	67,5	77,5	38,1	36,2	510,3
Halfway F[1]	1 183,8	1 464,0	1 417,5	1 338,9	1 199,8	922,7	709,1	690,3	859,9	246,1	295,5	356,8	10 884,4
Totals	4 286,8	3 510,9	3 542,2	1 982,2	1 608,1	1 157,4	1 084,8	1 131,3	1 358,0	710,2	1 489,4	4 345,1	26 404,4
Weasel West -													
Halfway A[1]	67,9	67,5	75,2	66,7	15,7	51,4	41,9	66,8	57,6	51,2	55,5	68,5	685,9
Halfway B[1]	6,9	7,8	5,0	6,4	1,8	1,1	3,4	4,0	3,9	56,2	4,9	3,3	106,7
Totals	74,8	75,3	80,2	73,1	17,5	52,5	45,3	70,8	61,5	107,4	60,4	73,8	792,6
Wilder -													
Halfway A	4 366,8	7 583,8	3 645,8	4 382,6	6 229,5	6 166,5	581,5	418,2	4 349,5	4 447,9	754,0	7 466,5	50 396,0
Wildmint -													
Bluesky A	198,3	166,8	196,2	186,6	152,7	174,5	152,4	181,1	180,3	192,7	189,3	213,9	2 184,6
Upper Halfway A[1]	310,8	273,5	317,9	365,2	306,5	278,2	362,3	387,7	352,9	381,7	332,4	324,1	3 993,2
Halfway A	--- --- -	--- --- -	--- --- -	1,5	--- --- -	--- --- -	,4	--- --- -	--- --- -	--- --- -	--- --- -	--- --- -	1,7
Halfway A[1]	235,4	221,6	366,4	285,5	208,0	296,4	332,9	419,5	471,6	498,9	546,1	521,7	4 404,0
Totals	744,5	661,9	880,5	838,6	667,2	748,9	848,0	988,3	1 004,8	1 073,3	1 067,8	1 059,7	10 583,5
Willow -													
Gething A[1]	174,9	157,0	197,2	140,5	89,3	117,8	173,5	169,6	110,8	--- --- -	150,6	187,1	1 628,3
Halfway A	1 960,8	1 566,1	604,5	246,6	18,9	105,4	1 508,1	1 841,7	1 525,5	232,7	--- --- -	1 472,5	11 082,8
Halfway B	686,8	655,4	--- --- -	--- --- -	--- --- -	189,0	1 239,6	1 251,7	1 166,2	100,3	16,0	1 935,3	7 240,3
Totals	2 822,5	2 378,5	761,7	387,1	108,2	412,2	2 921,2	3 263,0	2 802,5	333,0	166,6	3 594,9	19 951,4
Wolf -													
Halfway A[1]	111,5	115,9	89,9	93,8	88,3	106,2	92,1	92,9	65,4	156,2	104,6	150,0	1 266,8

Wolverine -													
Dunlevy A	--- --- -	--- --- -	--- --- -	--- --- -	--- --- -	--- --- -	--- --- -	--- --- -	--- --- -	82,4	335,5	495,2	913,1
Woodrush -													
Halfway A	3 091,5	2 488,7	2 330,4	141,1	--- --- -	331,7	3 678,2	3 677,5	918,6	--- --- -	2 267,8	2 577,7	21 503,2
Yoyo -													
Pine Point A	200 857,2	90 156,1	96 552,0	103 742,6	110 185,9	72 189,6	--- --- -	--- --- -	57 117,2	123 347,9	150 200,0	176 294,0	1 180 642,5
Pine Point B	8 139,0	7 712,6	8 545,8	1 171,4	--- --- -	--- --- -	--- --- -	--- --- -	--- --- -	--- --- -	4 801,6	6 533,3	36 903,7
Totals	208 996,2	97 868,7	105 097,8	104 914,0	110 185,9	72 189,6	--- --- -	--- --- -	57 117,2	123 347,9	155 001,6	182 827,3	1 217 546,2
Other Areas -													
Baldonnel[1]	--- --- -	--- --- -	603,2	--- --- -	--- --- -	--- --- -	--- --- -	--- --- -	--- --- -	--- --- -	--- --- -	--- --- -	603,2
Septimus[1]	9,8	5,8	6,5	1,2	--- --- -	--- --- -	--- --- -	--- --- -	--- --- -	--- --- -	--- --- -	1,6	24,9
Inga[1]	30,3	27,8	--- --- -	3,6	3,3	6,3	12,1	13,1	12,1	9,0	2,4	5,3	125,5
Halfway[1]	--- --- -	3,1	,2	--- --- -	--- --- -	--- --- -	--- --- -	--- --- -	--- --- -	--- --- -	--- --- -	--- --- -	3,3
Slave Point	5 936,1	5 305,8	6 407,6	6 421,8	7 459,9	1 211,3	--- --- -	--- --- -	--- --- -	--- --- -	7 354,5	14 407,7	54 504,7
Sulphur Point	1 541,7	1 183,8	817,0	115,6	--- --- -	--- --- -	--- --- -	--- --- -	--- --- -	--- --- -	242,2	1 163,3	5 063,6
Confidential[1]	--- --- -	--- --- -	--- --- -	--- --- -	--- --- -	--- --- -	--- --- -	--- --- -	--- --- -	--- --- -	--- --- -	1,0	1,0
Totals	7 517,9	6 526,3	7 834,5	6 542,2	7 463,2	1 217,6	12,1	13,1	12,1	9,0	7 599,1	15 579,1	60 326,2
Totals -													
Non-Associated	892 212,1	649 019,8	599 873,4	516 123,0	421 553,2	363 865,2	344 826,3	335 817,7	540 047,8	667 558,2	901 285,3	1 164 780,2	7 396 962,2
Associated	42 691,4	41 798,4	45 158,2	39 442,0	35 229,5	38 185,1	39 191,5	41 665,2	42 624,0	42 456,0	40 646,2	43 773,2	492 860,7
Totals	934 903,5	690 818,2	645 031,6	555 565,0	456 782,7	402 050,3	384 017,8	377 482,9	582 671,8	710 014,2	941 931,5	1 208 553,4	7 889 822,9

[1] Associated Gas

Table F11 - Monthly Supply and Disposition of Crude Oil/Pentanes Plus, 1983

(Volumes in m^3 at 15°C)

	January	February	March	April	May	June	July	August	September	October	November	December	Totals
SUPPPLY													
British Columbia Production													
Crude Oil	182 049,6	166 786,1	184 543,4	173 319,3	153 203,7	163 922,3	170 612,0	181 306,3	175 886,8	177 350,0	168 513,0	179 193,7	2 078 771,3
Field Condensate	2 532,0	1 591,7	1 579,4	1 082,2	780,8	1 054,3	1 739,2	2 077,5	1 534,7	950,1	649,9	2 159,0	17 639,9
Plant Condensate	12 425,2	7 872,0	4 457,8	5 030,8	3 242,3	5 616,2	14 985,6	13 381,1	11 167,3	7 620,9	10 770,6	17 413,9	113 983,7
Total British Columbia	197 006,8	176 249,8	190 580,6	179 432,3	157 226,8	170 592,8	187 336,8	196 764,9	188 588,8	185 921,0	180 135,5	198 766,6	2 210 390,9
Alberta Imports													
Pipeline	498 722,3	521 169,6	444 919,2	442 728,4	679 245,7	761 444,9	738 706,8	693 741,0	492 975,2	444 899,2	540 687,2	585 291,5	6 844 533,0
Rail	5 195,5	4 662,1	4 194,1	4 780,2	3 472,5	3 258,7	2 989,4	3 014,8	2 123,4	3 400,0	2 809,4	3 709,8	43 609,9
Total Alberta	503 917,8	525 831,7	449 113,3	447 508,6	682 718,2	764 703,6	741 696,2	696 755,8	495 098,6	448 299,2	543 496,6	589 001,3	6 888 142,9
Total Supply	700 984,6	702 081,5	639 693,9	626 940,9	839 945,0	935 296,4	929 033,0	893 520,7	683 687,4	634 220,2	723 634,1	787 767,9	9 098 533,8
DISPOSITION													
Inventory Changes -													
Field	1 438,7	- 1 202,5	459,9	845,4	- 484,9	- 778,9	110,1	- 424,4	322,5	- 12,1	1 405,6	- 834,8	889,6
Plant	- 1 268,6	- 5 369,4	- 1 142,1	304,8	- 903,5	5 936,7	1 430,6	- 5 049,0	6 130,1	- 3 866,6	1 006,3	1 876,3	- 514,4
Transporters	11 378,6	-25 399,0	-60 897,0	- 6 475,3	89 669,5	-31 093,3	-29 811,7	2 267,1	15 786,1	-10 192,9	-24 248,3	27 332,5	-41 483,7
Totals	11 549,7	-31 970,9	-61 343,2	- 5 325,1	88 681,1	-25 927,5	-28 271,0	- 3 206,3	22 238,5	-14 071,6	-21 836,4	28 374,0	-41 108,7
Losses and Adjustments -													
Field	- 296,5	2 601,4	- 1 277,2	- 910,8	- 261,4	- 791,7	- 588,3	- 925,9	- 103,7	- 766,9	- 1 237,2	- 1 131,3	- 5 642,5
Plant	33,8	105,5	12,9	29,3	- 92,0	- 150,0	124,9	5,7	- 42,4	- 54,8	19,4	--- --- -	- 9,7
Transporters	265,9	- 2 799,7	- 1 079,5	43,4	3 022,4	- 1 501,8	2 501,4	255,8	- 1 588,4	924,0	- 1 893,8	- 2 620,0	- 4 490,3
Totals	3,2	- 94,8	- 2 343,8	- 838,1	2 714,0	- 2 443,5	2 038,0	- 682,4	- 1 734,5	102,3	- 3 111,6	- 3 751,3	-10 142,5
Transfers	104,5	1 052,1	- 187,5	- 97,7	--- --- -	594,7	- 390,7	13 610,6	674,5	2 473,3	- 694,6	21,5	17 160,7
Deliveries													
To British Columbia refineries -													
British Columbia Production	183 883,1	210 567,3	196 636,9	214 079,2	155 089,3	205 801,3	211 984,4	218 634,8	149 623,2	193 349,8	208 924,9	186 402,0	2 334 956,2
Alberta Production	444 291,9	427 225,5	391 355,5	368 330,7	498 264,9	524 122,2	552 044,7	577 880,9	429 695,9	361 372,5	447 611,5	537 077,3	5 559 273,5
Totals	628 175,0	637 792,8	587 992,4	582 409,9	653 334,2	729 923,5	764 029,1	796 515,7	579 319,1	554 722,3	656 536,4	723 479,3	7 894 229,7
To export -													
British Columbia Production	--- --- -	--- --- -	--- --- -	--- --- -	--- --- -	--- --- -	--- --- -	--- --- -	--- --- -	--- --- -	--- --- -	--- --- -	- --- --- -
Alberta Production	48 222,5	87 869,2	110 492,8	47 583,7	91 697,0	234 046,2	177 857,1	82 270,1	84 061,2	81 638,3	83 241,5	25 441,9	1 155 021,5
Totals	48 222,5	87 869,2	110 492,8	47 583,7	91 697,0	234 046,2	177 857,1	82 270,1	84 061,2	81 638,3	83 241,5	25 441,9	1 155 021,5
Reporting Adjustment	12 869,7	7 433,1	5 085,2	3 208,2	3 518,7	- 1 497,0	13 770,5	5 013,0	- 831,4	9 355,6	9 498,8	14 202,5	83 373,1
Total Disposition	700 924,6	702 081,5	639 693,9	626 940,9	839 945,0	935 296,4	929 033,0	893 520,7	683 687,4	634 220,2	723 634,1	787 767,9	9 098 533,8

	January	February	March	April	May	June	July	August	September	October	November	December	Totals
BRITISH COLUMBIA REFINERIES													
Receipts -													
British Columbia Crude	213 080,5	282 668,1	224 417,6	241 811,7	229 936,5	234 120,7	226 919,8	218 645,4	147 281,8	191 947,8	206 531,5	164 377,0	2 601 958,4
British Columbia Condensate	104,4	1 052,1	- 259,7	- 97,7	--- --- -	- 411,6	12 727,2	14 229,0	1 220,7	2 985,1	66,7	--- --- -	31 816,2
Totals	213 184,9	283 940,2	224 157,9	241 714,0	229 936,5	233 709,1	239 647,0	232 874,4	148 502,5	194 932,9	206 598,2	164 377,0	2 633 574,6
Alberta Crude	405 360,8	363 879,2	352 455,2	325 170,9	446 259,0	469 921,6	494 509,9	520 886,5	374 616,0	307 861,8	408 207,9	479 449,3	4 948 578,1
Alberta Condensate	53 595,0	40 312,0	56 369,0	57 162,0	71 833,0	72 356,0	69 839,0	71 442,0	64 442,0	56 377,0	53 168,0	72 295,0	739 191,0
Totals	458 956,8	404 191,2	408 824,2	382 332,9	518 092,0	542 277,6	564 348,9	592 328,5	439 058,0	364 238,8	461 375,9	551 744,3	5 687 769,1
Total Receipts	672 141,7	688 131,4	632 982,1	624 046,9	748 028,5	775 986,7	803 995,9	825 002,9	587 560,5	559 171,7	667 974,1	736 121,3	8 321 143,7
Disposition -													
Inventory Changes	-44 502,5	18 709,8	4 842,5	- 285,1	-91 615,1	-11 246,7	4 843,0	25 871,8	-38 185,6	18 377,0	- 7 872,8	2 864,3	- 80 379,2
Losses and Adjustments	19 109,7	39 771,9	20 103,9	27 015,0	73 641,9	51 295,7	14 192,5	- 72,0	88,0	34,0	142,0	143,0	245 445,6
Refinery Run-													
British Columbia Production	236 739,0	235 667,0	210 503,2	193 313,8	192 075,0	200 677,3	223 214,4	217 205,7	169 983,7	177 111,8	219 964,4	184 649,8	2 461 304,9
Alberta Production	460 795,3	393 782,7	397 532,5	404 003,2	533 926,7	535 260,4	561 946,0	581 997,4	455 694,4	365 848,9	455 740,5	548 444,4	5 694 772,4
Totals	697 534,3	629 449,7	608 035,7	597 317,0	726 001,7	735 937,7	785 160,4	799 203,1	625 678,1	542 760,7	675 704,9	733 094,0	8 156 077,3
Total Disposition	672 141,7	688 131,4	632 982,1	624 046,9	748 028,5	775 986,7	803 995,9	825 002,9	587 560,5	559 171,7	667 974,1	736 121,3	8 321 143,7

Table P12 - Supply and Disposition of Natural Gas in North Eastern B.C., 1983

(Volumes in 10^3m^3 at 101.325 kPa 15°C)

	January	February	March	April	May	June	July	August	September	October	November	December	Totals
SUPPLY													
British Columbia Production													
Non-Associated Gas	878 921,9	845 547,2	997 808,7	913 965,9	420 858,8	365 951,8	344 838,0	333 869,5	330 523,6	660 997,8	901 420,3	1 164 812,0	7 388 360,0
Associated Gas	42 309,2	41 808,9	45 184,7	40 212,0	34 943,3	35 980,7	39 162,1	42 396,5	51 786,6	42 811,8	40 568,8	43 741,4	901 574,4
Gas Injection	- 3 096,4	- 2 714,5	- 2 996,8	- 3 041,6	- 3 185,3	- 2 942,1	- 2 710,8	- 3 265,3	- 3 156,0	- 3 484,3	- 3 249,5	- 3 451,6	- 37 294,2
Net British Columbia Production	918 214,7	884 641,6	839 796,8	951 136,3	452 617,8	399 970,4	381 309,5	373 000,5	379 154,2	700 325,3	938 739,6	1 205 101,8	7 852 640,7
Imports to Northeastern British Columbia -													
Alberta	39 413,1	72 686,4	36 208,0	31 657,1	17 783,4	16 367,5	21 856,4	19 547,9	21 650,0	63 011,6	70 247,9	118 730,7	553 082,0
Northwest Territories	28 460,3	32 500,7	8 112,1	7 695,8	8 479,0	8 108,8	— — -	— — -	10 086,2	11 828,1	17 636,2	38 120,4	171 009,6
Yukon	— — -	— — -	— — -	— — -	— — -	— — -	— — -	— — -	— — -	— — -	— — -	— — -	— — -
Total Imports	67 873,4	104 973,1	44 320,1	39 352,9	26 262,4	24 476,3	21 856,4	19 547,9	31 910,2	74 839,7	87 884,1	156 851,1	704 087,6
Total Supply	986 088,1	787 416,7	686 116,9	990 489,2	478 880,2	425 364,7	403 165,7	392 548,4	611 064,4	775 165,0	1 026 623,7	1 361 952,9	8 556 728,3
DISPOSITION													
Flared -													
Field	10 157,7	8 458,5	11 496,0	6 490,6	7 021,6	6 747,9	7 257,6	8 765,4	7 551,1	6 789,2	10 127,2	10 858,8	101 722,8
Gathering Systems	168,6	229,9	134,9	227,7	165,9	372,3	354,1	167,8	340,4	190,1	97,8	131,0	2 530,7
Plant	2 184,8	2 934,8	2 438,1	980,6	830,5	1 467,1	395,1	807,8	3 057,0	1 863,9	4 924,0	2 134,4	23 937,8
Totals	12 552,3	11 643,2	14 099,0	7 618,7	8 088,0	8 587,3	8 007,0	9 741,0	10 948,4	8 843,2	15 149,0	13 125,2	128 120,3
Fuel -													
Field	11 772,5	9 654,4	8 024,5	6 661,3	5 711,3	5 370,8	5 349,5	6 281,8	7 590,5	7 482,2	8 656,9	12 994,2	99 349,9
Compressor	870,7	903,2	435,0	285,9	249,0	202,5	517,2	421,7	627,3	684,4	717,8	1 066,9	6 383,6
Plant	50 143,9	42 021,1	43 344,8	34 761,6	27 213,7	23 154,3	13 231,7	16 401,3	33 634,2	40 831,0	44 088,7	49 801,4	418 407,8
Totals	62 593,1	52 178,7	51 804,4	41 708,8	33 170,0	28 727,6	19 098,4	23 104,8	41 852,0	48 997,6	53 843,4	63 862,5	520 141,3
Losses and Adjustments -													
Field	18 920,2	- 1 383,5	- 2 271,0	20 979,0	8 026,1	- 2 221,5	3 645,1	- 1 860,3	8 368,2	- 640,5	19 645,1	12 682,8	84 079,7
Plant	891,4	- 1 197,3	2 970,1	- 1 961,9	1 934,1	7 554,2	11 656,9	978,6	2 475,5	886,9	3 030,8	9 037,0	38 229,1
Totals	19 811,6	- 2 580,8	698,1	19 017,1	9 960,2	5 332,7	15 302,0	- 881,7	10 793,7	246,4	22 675,9	21 719,8	122 308,8
Line Pack	- 1 682,8	713,4	125,8	442,2	536,6	- 1 214,4	- 354,1	- 167,8	224,7	246,6	1 164,5	152,2	256,7
Processing Shrinkage	107 173,7	87 856,5	84 904,6	88 315,5	52 141,3	41 399,5	19 088,5	18 676,8	60 043,1	94 672,2	118 960,7	159 770,5	889 009,9
Reporting Adjustment	-22 171,8	- 5 106,8	- 1 779,9	- 7 065,9	- 575,3	- 572,7	- 512,3	2 852,4	- 790,7	- 2 472,7	1 755,2	1 361,8	- 9 017,0
Available Marketable Gas in Northeastern -													
British Columbia	807 647,0	642 720,7	536 704,1	460 430,8	375 777,9	342 726,7	342 536,2	339 222,0	487 992,2	624 631,7	833 277,0	1 126 951,1	6 899 911,3
Total Disposition	986 088,1	787 416,7	686 116,9	990 489,2	478 880,2	425 364,7	403 165,7	392 548,4	611 064,4	775 165,0	1 026 623,7	1 361 952,9	8 556 728,3

Supply and Disposition of Gas by Transporters in British Columbia

	January	February	March	April	May	June	July	August	September	October	November	December	Totals
SUPPLY													
Available Marketable Gas													
In Northeastern B.C.	807 843,0	642 720,7	536 704,1	460 430,6	375 277,9	342 726,7	342 536,2	339 422,9	487 992,2	624 631,7	813 277,0	1 126 551,1	6 899 911,3
Imports to southeastern B.C.													
Alberta	837 356,2	794 308,1	918 904,0	886 452,0	779 990,2	691 465,8	700 344,1	708 195,0	684 694,1	602 278,1	736 510,2	793 234,4	9 133 733,0
Total Supply	1 645 200,2	1 437 028,8	1 455 608,0	1 346 882,8	1 155 268,1	1 034 190,5	1 042 880,3	1 047 618,8	1 172 686,3	1 226 909,8	1 549 787,2	1 919 785,5	16 033 644,9
DISPOSITION													
Fuel	16 111,1	14 998,1	12 310,3	10 999,3	10 402,9	9 276,1	8 641,9	8 496,1	11 663,9	13 078,9	19 435,3	37 897,5	195 267,0
Losses and Adjustments	- 720,6	1 308,9	- 2 238,0	571,3	- 4 046,9	8 886,8	3 398,0	5 548,1	8 977,2	3 192,1	88,7	12 874,7	37 012,3
Line Pack Changes	- 4 147,1	- 3 222,9	- 811,8	2 682,4	- 7 669,4	- 8 301,1	4 932,7	117,8	- 83,0	13 072,1	- 919,5	2 763,4	- 1 580,4
Deliveries to B.C. Distributors													
North	17 041,3	19 116,3	14 842,7	8 864,9	6 696,7	4 972,0	4 207,2	4 801,7	6 144,0	9 293,7	13 093,0	19 621,0	128 898,9
Interior	249 768,9	190 684,8	193 431,0	134 037,6	147 380,7	147 637,8	134 123,8	117 386,7	152 162,0	179 671,0	220 905,3	286 549,6	2 127 749,8
Lower Mainland	271 536,5	246 592,0	235 464,2	179 363,1	161 209,2	122 166,2	118 694,6	124 260,5	132 960,1	117 498,2	252 341,6	334 372,5	2 336 478,7
Total	538 346,7	456 584,4	423 737,9	342 265,6	295 686,6	274 796,0	257 025,6	246 436,9	291 266,1	380 202,9	485 641,9	640 539,1	4 609 126,8
Deliveries to Export -													
From British Columbia Gas	242 196,5	154 950,8	105 927,5	105 144,8	79 376,7	72 053,9	89 366,6	98 408,4	190 975,8	230 483,2	317 014,8	460 884,4	2 146 783,4
From Alberta Gas	804 972,5	771 141,2	893 569,6	860 399,0	759 579,4	663 562,0	679 378,2	690 189,8	658 716,6	569 451,9	706 871,4	764 785,5	8 804 616,9
From N.W.T. Gas	46 758,8	47 613,0	23 640,5	23 495,1	22 092,8	16 183,2	--- --- -	--- --- -	13 778,6	15 317,5	22 978,5	46 230,2	278 088,2
Total	1 093 927,8	973 705,0	1 023 137,6	989 038,9	861 048,9	751 799,1	768 744,8	788 598,2	863 473,0	815 252,6	1 046 864,7	1 253 897,9	11 229 488,5
Reporting Adjustment	- 319,7	- 2 355,2	- 527,4	1 325,3	- 354,0	- 2 268,4	137,3	- 1 780,3	- 2 590,5	53,2	- 1 601,9	- 3 387,1	- 15 668,7
Total Disposition	1 645 200,2	1 437 028,8	1 455 608,0	1 346 882,8	1 155 268,1	1 034 190,5	1 042 880,3	1 047 618,8	1 172 686,3	1 226 909,8	1 549 787,2	1 919 785,5	16 033 644,9

Supply and Disposition of Gas by Distributors in British Columbia

SUPPLY													
Natural and L.P. Gas													
From Transporters	546 424,8	460 284,6	427 878,7	347 465,7	299 653,6	277 942,2	260 072,0	249 595,0	294 940,3	355 204,4	492 889,8	669 637,1	4 714 482,4
From Storage	390,0	2 777,5	232,1	235,8	277,8	275,6	243,8	233,6	--- --- -	--- --- -	--- --- -	29 185,6	35 849,8
Other Receipts	141,0	--- --- -	--- --- -	--- --- -	--- --- -	--- --- -	170,8	--- --- -	102,0	--- --- -	--- --- -	--- --- -	413,8
Total Supply	546 955,8	463 062,1	428 110,8	347 701,5	299 931,4	278 388,6	260 315,8	249 930,6	294 940,3	355 204,4	492 889,8	698 820,7	4 748 746,0
DISPOSITION													
Fuel	3 014,0	2 148,9	1 250,7	1 786,3	1 802,0	1 953,1	1 564,4	965,9	1 597,5	825,8	2 380,0	2 918,3	22 226,9
Losses and Adjustments	- 10 765,0	- 25 727,3	- 8 007,4	- 56 511,8	- 37 018,4	- 15 393,9	- 1 99,1	- 3 173,4	32 536,4	48 537,2	39 905,4	481 696,2	444 142,9
Line Pack Changes	413,5	- 105,4	- 965,4	772,1	- 542,2	156,5	1 333,3	- 695,7	312,4	- 832,4	233,1	249,5	129,1
To Storage	--- --- -	--- --- -	--- --- -	--- --- -	--- --- -	--- --- -	16 626,2	29 718,0	2 338,2	--- --- -	--- --- -	--- --- -	48 682,4
Sales -													
Residential	185 675,5	176 804,0	143 003,9	130 736,0	88 059,5	60 682,0	44 025,2	39 382,5	41 532,1	62 563,8	160 006,2	- 20 695,4	1 131 773,3
Commercial	167 962,3	146 460,4	128 634,6	115 134,9	79 500,5	56 586,7	47 358,4	41 510,1	50 359,5	72 896,6	131 163,3	- 4 454,3	1 046 127,2
Industrial	198 568,5	161 300,1	161 921,7	154 079,6	166 719,4	172 430,3	150 203,7	140 920,5	165 029,1	164 993,4	156 779,8	242 071,1	2 035 017,2
Electric Power	2 085,2	2 181,4	2 272,7	1 702,4	1 410,6	1 973,9	1 343,7	1 282,7	1 233,1	6 420,0	1 702,0	- 2 980,7	20 647,0
Total	554 291,5	486 745,9	435 832,9	401 654,9	335 690,0	291 672,9	242 931,0	223 095,8	258 153,8	306 873,8	450 171,3	213 936,7	4 233 364,7
Total Disposition	546 955,8	463 062,1	428 110,8	347 701,5	299 931,4	278 388,6	260 315,8	249 930,6	294 940,3	355 204,4	492 889,8	698 820,7	4 748 746,0
Revenue (in dollars)	870 976 131,	57 674 051,	57 414 846,	57 182 659,	44 829 081,	37 829 842,	33 681 286,	33 605 435,	36 997 952,	41 888 424,	71 706 667,	27 191 996,	576 978 390,

Table P13 - Monthly Supply and Disposition of Propane, 1983

(Volumes in m^3 at 15°C)

	January	February	March	April	May	June	July	August	September	October	November	December	Totals
SUPPLY													
British Columbia Production													
Plant	5 975,2	6 194,0	5 971, 2	5 181,7	3 821,5	3 455,2	5 195,0	5 269,0	5 428,5	4 488,5	5 303,7	6 210,9	62 494,4
Refinery	13 547,4	11 351,5	9 431,9	9 727,1	13 374,3	13 556,5	12 599,4	13 394,0	12 626,2	10 645,4	11 284,1	12 126,0	143 663,8
Total British Columbia	19 522,6	17 545,5	15 403,1	14 908,8	17 195,8	17 011,7	17 794,4	18 663,0	18 054,7	15 133,9	16 587,8	18 336,9	206 158,2
Alberta Imports	56 953,1	52 902,0	81 842,2	77 554,1	79 087,6	73 053,6	48 980,4	51 415,5	37 134,0	27 308,1	24 851,9	44 364,8	655 447,9
Total Supply	76 475,7	70 447,5	97 245,3	92 462,9	96 283,4	90 065,3	66 774,8	70 078,5	55 188,7	42 442,0	41 439,7	62 701,7	861 606,1
DISPOSITION													
Inventory	763,1	827,0	- 838,4	- 956,4	- 356,8	580,4	3,2	- 198,0	- 454,0	- 317,5	1 106,3	354,0	512,9
Transfers	-1 884,1	- 831,5	-1 615,4	-1 024,6	- 103,7	-1 741,2	-1 850,6	- 965,6	-1 553,0	-1 581,0	-1 249,0	-1 235,5	-15 435,2
Losses and Adjustments	57,4	84,7	9,6	68,7	94,0	55,9	43,7	18,5	20,5	1,0	34,4	,8	489,2
Sales of British Columbia Production	20 408,2	17 465,3	17 847,3	16 821,1	17 562,3	18 116,6	19 598,1	19 808,1	20 041,2	17 031,4	16 696,1	19 217,6	220 611,3
Sales of Alberta Production													
British Columbia	30 439,1	26 075,0	52 228,8	46 133,5	51 311,6	41 834,0	14 756,0	13 309,9	20 720,2	21 678,8	20 550,6	33 729,9	372 767,4
Offshore	26 514,0	26 827,0	29 613,4	31 420,6	27 776,0	31 219,6	34 224,4	38 105,6	16 413,8	5 629,3	4 301,3	10 634,9	282 680,5
Total	56 953,1	52 902,0	81 842,2	77 554,1	79 087,6	73 053,6	48 980,4	51 415,5	37 134,0	27 308,1	24 851,9	44 364,8	655 447,9
Total Sales	77 359,3	70 367,3	99 689,5	94 375,2	96 649,9	91 170,2	68 578,5	71 223,6	57 175,2	44 339,5	41 548,0	63 582,4	876 059,2
Total Disposition	76 475,7	70 447,5	97 245,3	92 462,9	96 283,4	90 065,3	66 774,8	70 078,5	55 188,7	42 442,0	41 439,7	62 701,7	861 606,1

Table P14 - Monthly Supply and Disposition of Butanes, 1983

(Volumes in m^3 at 15°C)

	January	February	March	April	May	June	July	August	September	October	November	December	Totals
SUPPLY													
British Columbia Production													
Plant	8 254,0	6 017,8	5 773,8	5 451,1	3 730,1	5 594,0	7 991,8	7 385,7	7 473,3	6 857,9	7 022,1	8 739,8	80 291,4
Refinery	3 943,9	4 850,9	4 045,3	7 589,8	8 399,5	8 375,1	6 827,1	7 610,7	1 753,2	281,8	2 906,8	4 262,5	60 876,4
Total British Columbia	12 197,9	10 868,7	9 819,1	13 040,9	12 129,6	13 969,1	14 818,9	14 996,4	9 226,5	7 119,7	9 928,9	13 002,1	141 117,8
Alberta Imports	— — -	— — -	— — -	— — -	— — -	— — -	— — -	— — -	— — -	600,4	1 604,0	1 600,6	3 805,0
Total Supply	12 197,9	10 868,7	9 819,1	13 040,9	12 129,6	13 969,1	14 818,9	14 996,4	9 226,5	7 720,1	11 532,9	14 602,7	144 922,8
DISPOSITION													
Inventory Changes	1 267,4	- 667,4	257,5	259,4	- 141,2	487,0	473,6	1 632,1	- 915,7	- 808,5	- 523,7	636,0	1 936,5
Transfers	— — -	— — -	— — -	— — -	— — -	— — -	— — -	— — -	— — -	— — -	— — -	— — -	— — -
Gasoline Blending	3 837,4	2 955,3	3 096,0	2 092,9	927,6	3 382,2	2 409,5	2 779,6	3 438,3	5 405,6	4 872,4	3 428,9	38 626,2
Losses and Adjustments	6,6	34,8	- ,2	- 49,9	- 31,3	- 516,7	28,2	- 93,7	13,6	- 1,9	24,6	,2	- 585,7
Sales of British Columbia Production	7 086,0	8 546,0	6 465,8	10 758,5	11 374,5	10 616,6	11 907,6	10 678,4	6 690,3	2 524,5	5 555,6	8 937,0	101 140,0
Sales of Alberta Production -													
British Columbia	— — -	— — -	— — -	— — -	— — -	— — -	— — -	— — -	— — -	600,4	1 604,0	1 600,6	3 805,0
Total Sales	7 086,0	8 546,0	6 465,8	10 758,5	11 374,5	10 616,6	11 907,6	10 678,4	6 690,3	3 124,9	7 159,6	10 537,6	104 945,8
Total Disposition	12 197,9	10 868,7	9 819,1	13 040,9	12 129,6	13 969,1	14 818,9	14 996,4	9 226,5	7 720,1	11 532,9	14 602,7	144 922,8

Table P15 - Monthly Supply and Disposition of Sulphur, 1983

(Volumes in Metric Tonnes)

	January	February	March	April	May	June	July	August	September	October	November	December	Totals
SUPPLY													
British Columbia Production	29 415,8	24 722,6	24 797,5	17 210,4	8 598,5	7 368,0	8 179,2	8 938,6	19 447,9	32 296,3	37 310,3	40 690,9	258 976,0
DISPOSITION													
Inventory Storage	7 617,5	-4 852,6	- 69,5	435,9	- 29,5	- 535,8	- 154,9	--- -	532,5	373,2	176,4	47,8	549,1
Sales -													
North America	2 674,4	11 779,5	12 403,0	8 834,0	--- -	--- -	--- -	--- -	11 990,0	25 676,0	20 278,0	18 620,2	110 255,1
Offshore	19 123,9	17 795,7	12 464,0	9 940,5	8 628,0	7 903,8	8 334,1	8 938,6	6 925,4	6 247,1	16 855,9	22 022,9	148 171,8
Totals	21 798,3	29 575,2	24 867,0	18 774,5	8 628,0	7 903,8	8 334,1	8 938,6	18 915,4	31 923,1	37 133,9	40 643,1	258 426,9
Total Disposition	29 415,8	24 722,6	24 797,5	17 210,4	8 598,5	7 368,0	8 179,2	8 938,6	19 447,9	32 296,3	37 310,3	40 690,9	258 976,0

Table P16 - Crude-oil Pipelines, 1983

Company	Field Served	Size, mm	Length, km	Pumping Stations No.	Present Capacity m^3/day	Gathering Capacity	Lines km	Throughput m^3/day	Storage Capacity m^3
Canterra Energy Limited	Inga	168,3	5,1	2	1 240	--	--	200	--
		114,3	14,0	1	1 590	1 590	22,2	300	--
		88,9	5,2	1	254	--	--	--	--
Norcen Energy Resources Limited	Beatton River, Beatton River West, Boundary Lake,	--	--	28	22 409	10 256[1]	52,0	4 800	22 260
	Bulrush, Currant, Eagle, Milligan Creek, Peejay,	323,9	62,9	--	--	7 154[2]	--	--	--
	Weasel, Wildmint, Willow, Wolf,	219,1	169,3	--	--	--	--	--	--
		168,3	72,4	--	--	--	--	--	--
		114,3	142,0	--	--	--	--	--	--
Suncor Inc.	Aitken Creek, Blueberry	323,9	3,8	--	--	--	--	--	--
		219,1	1 002,0	1	795	1 908	62,4	265	10 334
	Fort St. John	--	--	--	--	--	--	29	159
	Inga	168,3	2,7	1	1 987	1 987	--	653	--
	Stoddart	--	--	--	--	--	--	12	--
Westcoast Petroleum Ltd.		323,9	615,8	12	11 129	11 129	--	4 545	93 167

1 Boundary Lake
2 Terminal to Westcoast Petroleum Ltd.

Table P17 - Crude-oil Refineries, 1983

Name	Location	Type	Year of First Operation	Source of Crude	Crude Oil Capacity m^3/calendar day	Storage Capacity m^3	Cracking Plant Units	Cracking Capacity m^3/calendar day	Other Units
Chevron Canada Ltd.....	North Burnaby.....	Complete	1936	B.C. and Alberta	5 960	309 390	Catalytic fluid	1 590	Catalytic polymerization, catalytic reformer, lube-oil blending plant, asphalt, sulphur recovery.
Gulf Canada Products Company.....	Port Moody.....	Complete	1958	B.C. and Alberta	5 910	284 930	Catalytic fluid	1 960	Catalytic reformer, distillate, desulphurization, alkylation sulphuric acid, naphtha-sulphurization, merox, sulphur.
Husky Oil Operations Ltd.....	Prince George.....	Complete	1967	B.C.	1 510	175 815	Catalytic fluid	515	Unifiner, reformer, asphalt, sulphur, gas concentration.
Imperial Oil Limited.....	Ioco.....	Complete	1915	B.C. and Alberta	6 465	485 705	Catalytic fluid	2 000	Catalytic polymerization, power-former toluene extraction, sulphur, LPG plant, desulphurization.
Petro-Canada Products Inc.....	Taylor.....	Complete	1960	P..	2 860	202 900	Catalytic fluid	980	H. F. alkylation, asphalt, pentane splitter, platformer unifiner, HDS unit, DDS unit, vacuum distillation.
Shell Canada Limited.....	North Burnaby.....	Complete	1952	B.C. and Alberta	3 820	348 000	Catalytic fluid	978	Catalytic polymerization, platformer, vacuum flashing, solvent fractination, distillate hydrotreater, sulphur recovery, asphalt.

Table P18 - Natural Gas Pipelines, 1983 - Continued

Company	Source of Natural Gas	Transmission Lines		Compressor Stations			Gathering and Distribution Lines		Areas Served by Distributors
		Size mm	km	No.	Power Watts 10^6	Daily Capacity $10^3 m^3$	Size mm	km	
Pacific Northern Gas Ltd.	Westcoast Transmission Co. Ltd.	323.9	42.8	4	13.73	2 629.0	--	--	
		266.7	491.4	--	--	--	168.3	6.2	
		219.1	151.7	--	--	--	114.3	23.1	
		168.3	57.9	--	--	--	88.9	43.0	
		114.3	26.3	--	--	--	60.3	124.8	
		88.9	70.5	--	--	--	42.2	150.5	
		73.0	29.0	--	--	--	26.7	90.7	
		60.3	70.4	--	--	--	21.3	0.7	
		42.2	6.8	--	--	--	--	--	
Westcoast Transmission Co. Ltd.	Alberta	660.0	52.3	--	--	6 057.0	--	--	
	Taylor-Willow Flats	660.0	122.8	--	--	--	--	--	
		914.0	37.3	--	--	--	--	--	
	Fort Nelson-Willow Flats	660.0	355.3	4	69.65	24 175.0	--	11.3	
		914.0	74.8	--	--	--	--	--	
	Aitken Creek	--	--	--	--	--	323.9	31.4	
	Alaska Highway system	--	--	--	--	--	660.0	60.6	
		--	--	--	--	--	508.0	29.1	
		--	--	--	--	--	457.0	28.8	
		--	--	--	--	--	323.9	15.9	
	Beaver River	610.0	178.5	1	29.08	7 607.0	--	--	
	Beg Field	--	--	--	--	--	406.4	44.1	
		--	--	--	--	--	168.3	9.5	
	Blueberry West Field	--	--	--	--	--	219.1	10.8	
	Boundary Lake Field	--	--	1	2.98	--	406.4	51.3	
		--	--	--	--	--	168.3	4.7	
	Bubbles Field	--	--	1	0.49	--	--	--	
	Buick Creek Field	--	--	--	--	--	660.0	2.9	
		--	--	--	--	--	273.1	11.7	
	Buick Creek East Field	--	--	--	--	--	219.1	10.6	
	Buick Creek West Field	--	--	1	1.48	--	508.0	26.1	
	Bullmoose Field	--	--	--	--	--	219.1	13.0	
	Cache Creek Field	--	--	--	--	--	168.3	13.8	
	Charlie Lake Field	--	--	--	--	--	168.3	3.7	
	Clarke Lake Field	--	--	--	--	--	406.4	44.7	
	Clarke Lake South Field	--	--	--	--	--	219.1	18.4	
	Dawson Creek Field	--	--	--	--	--	219.1	8.7	
	Firewood Field	--	--	--	--	--	273.1	24.6	
		--	--	--	--	--	168.3	6.8	
		--	--	--	--	--	101.6	8.0	
	Flatrock Field	--	--	--	--	--	101.6	8.0	
	Fort St. John Field	--	--	3	1.48	--	457.0	12.6	
		--	--	--	--	--	273.1	1.4	
		--	--	--	--	--	219.1	1.1	
	Fort St. John Southeast Field	--	--	--	--	--	323.9	11.3	
	Gundy Creek Field	--	--	--	--	--	273.1	9.8	

Table P18 - Natural Gas Pipelines, 1983

Company	Source of Natural Gas	Transmission Lines		Compressor Stations		Daily Capacity	Gathering and Distribution Lines		Areas Served by Distributors
		Size mm	km	No.	Power Watts 10^6	$10^3 m^3$	Size mm	km	
British Columbia Hydro and Power Authority	Westcoast Transmission Co. Ltd.	1 006.8	29.9	—	—	27 840.0	—	7 634.1	Lower Mainland of British Columbia
		914.4	12.8	—	—	—	—	—	
		762.0	56.3	—	—	—	—	—	
		610.0	30.0	—	—	—	—	—	
		508.0	28.9	—	—	—	—	—	
		457.0	29.6	—	—	—	—	—	
		323.9	42.1	—	—	—	—	—	
		168.3	1.9	—	—	—	—	—	
Columbia Natural Gas Ltd.	Alberta and Southern Gas Company Limited	219.1	89.1	—	—	2 428.0	219.1	3.0	Cranbrook, Fernie, Kimberley, Creston, Sparwood, Elk Valley, Skookumchuck, Elko, Elkford, Yahk, Galloway, and Jaffrey.
		168.3	113.6	—	—	—	168.3	8.9	
		114.3	35.1	—	—	—	114.3	21.5	
		88.9	45.2	—	—	—	88.9	43.0	
		60.3	11.3	—	—	—	60.3	104.2	
		—	—	—	—	—	42.2	127.8	
		—	—	—	—	—	26.3	0.3	
		—	—	—	—	—	—	—	
ICG Utilities Ltd.	Westcoast Transmission Co. Ltd.	168.3	0.5	—	—	338.0	114.3	38.1	
		114.3	33.6	—	—	—	88.9	14.0	
		88.9	7.4	—	—	—	73.0	5.8	
		60.3	3.2	—	—	—	60.3	171.7	
		—	—	—	—	—	48.3	55.9	
		—	—	—	—	—	42.2	1.1	
		—	—	—	—	—	33.4	65.3	
		—	—	—	—	—	26.7	28.0	
Inland Natural Gas Co.	Westcoast Transmission Co. Ltd.	323.9	575.3	3	4.92	6 655.0	219.1	20.6	Peace River, Prince George, Cariboo, Thompson, Okanagan, and Kootenay areas.
		273.0	191.7	—	—	—	168.3	77.7	
		219.1	53.8	—	—	—	114.3	991.4	
	Alberta and Southern Gas Co. Limited	168.3	198.1	—	—	—	88.9	155.8	
		114.3	272.6	—	—	—	60.3	1 456.0	
		88.9	113.0	—	—	—	48.3	33.3	
		60.3	143.3	—	—	—	42.2	1 090.3	
		48.3	0.2	—	—	—	—	—	
		42.2	2.3	—	—	—	—	—	
Northland Utilities (BC) Ltd.	Peace River Transmission Co.	88.9	3.2	—	—	282.0	273.1	1.2	Dawson Creek, Pouce Coupe, and Rolla.
		60.3	0.6	—	—	—	219.1	2.6	
		42.2	5.2	—	—	—	168.8	4.8	
		—	—	—	—	—	114.3	21.7	
		—	—	—	—	—	88.9	14.4	
		—	—	—	—	—	60.3	45.5	
		—	—	—	—	—	48.3	3.1	
		—	—	—	—	—	42.2	35.9	
		—	—	—	—	—	26.7	6.1	

Grizzly Field	--	--	--	--	--	610.0	56.5
	--	--	--	--	--	508.0	62.7
	--	--	--	--	--	273.1	14.3
Helmet Field	--	--	--	--	--	406.4	50.3
	--	--	--	--	--	273.1	20.3
	--	--	--	--	--	219.1	5.8
Jedney and Bubbles Fields	--	--	--	--	--	323.9	50.7
Junior and Sierra Fields	--	--	--	--	--	273.1	11.3
	--	--	--	--	--	609.6	62.5
	--	--	--	--	--	406.4	58.2
	--	--	--	--	--	323.9	13.1
Kobes and Townsend Fields	--	--	1	4.45	--	323.9	30.4
	--	--	--	--	--	219.1	8.9
Kotcho Lake Field	--	--	--	--	--	323.9	15.6
Kotcho Lake East Field	--	--	--	--	--	273.1	18.5
Laprise Creek Field	--	--	1	3.85	--	323.9	38.3
	--	--	--	--	--	168.3	4.0
Milligan-Pesjay System	--	--	1	2.98	--	323.9	51.8
	--	--	--	--	--	273.1	37.7
	--	--	--	--	--	219.1	21.2
	--	--	--	--	--	168.3	10.9
Monias Field	--	--	--	--	--	219.1	32.6
Montney Field	--	--	--	--	--	114.3	11.9
Rig Field	--	--	--	--	--	406.4	45.5
	--	--	--	--	--	168.3	3.7
Oak Field	--	--	--	--	--	406.4	33.3
	--	--	--	--	--	168.3	1.4
Parkland Field	--	--	--	--	--	219.1	10.8
Petitot-Louise System	--	--	--	--	--	273.1	19.0
	--	--	--	--	--	323.9	25.4
	--	--	--	--	--	406.4	10.5
	--	--	--	--	--	508.0	41.7
Red Creek Field	--	--	--	--	--	114.3	12.4
Rigel Field	--	--	1	3.07	--	323.9	17.9
	--	--	1	1.04	--	273.1	18.5
Rigel North Field	--	--	--	--	--	168.3	10.6
Sierra Field	--	--	--	--	--	323.9	10.9
	--	--	--	--	--	406.4	10.9
Silver-Oshi Area	--	--	--	--	--	406.4	72.1
	--	--	--	--	--	273.1	62.3
	--	--	--	--	--	168.3	9.7
Stoddart Field	--	--	1	1.04	--	219.1	10.1
Yoyo Field	--	--	--	--	--	610.0	77.2

Table F19 - Gas-processing Plants, 1983

Operator	Location	Fields Served	Plant Type	Year of First Operation	Plant Capacity 10^3m^3/Day In	Plant Capacity 10^3m^3/Day Out	Natural Gas	Residual Gas to-
BP Exploration Canada Limited	Unit 77, Block E, NTS Map 93-P-5	Bullmoose.....	Inlet separator, Mole sieve, dehydration, DEA glycol fuel gas treating	1980	2 002	1 974	.....	Westcoast Transmission Co. Ltd.
BP Exploration Canada Limited	Unit 65, Block B, NTS Map 93-P-5	Sukunka and Sukunka West.....	Inlet separator, Mole sieve, dehydration, DEA glycol fuel gas treating	1980	2 564	2 536	.....	Westcoast Transmission Co. Ltd.
Esso Resources Canada.....	SE 1/4, Sec. 2 Tp. 85, Rge. 14 WSM	Boundary Lake.....	Inlet separator, MEA absorption, treating glycol absorption, dehydration, combined refrigeration and oil absorption, natural gas liquid recovery	1964	990	480	Propane plus mixture	Westcoast Transmission Co. Ltd.
Mobil Oil of Canada Ltd.....	Unit 91, Block D, NTS Map 94-I-14	Sierre and Sahtaneh.....	Inlet separator, dry desiccant dehyration	1969	8 761	8 705	.....	Westcoast Transmission Co. Ltd.
Oakwood Petroleums Ltd.....	Unit 74, Block G, NTS Map 93-I-15	Grizzly North, Unit 1.....	Inlet separator, TEG dehydration, inlet compression	1978	1 416	1 416	.....	Westcoast Transmission Co. Ltd.
	Unit 74, Block G, NTS Map 93-I-15	Grizzly North, Unit 2.....	Inlet separator, molecular sieve, dehydration	1980	2 400	2 400	.....	Westcoast Transmission Co. Ltd.
	Unit 25, Block A, NTS Map 93-I-15	Grizzly South.....	Inlet separator, TEG dehyrdration, inlet compression	1978	1 416	1 415	.....	Westcoast Transmission Co. Ltd.
Petro-Canada Products Inc....	Sec. 36, Tp. 82, Rge. 18, W6M	All B.C. producing gas fields except Parkland and Boundary Lake that are between 56° and 58° latitude	Inlet separator, MEA treating, dry desiccant dehyrdration, oil absorption, distillation	1957	14 200	12 900	Condensate, pentanes plus, propanes, butanes	Westcoast Transmission Co. Ltd.
Westcoast Transmission Co. Ltd.	NW 1/4 Sec. 10 Tp. 85, Rge. 14, W6M	Boundary Lake.....	MEA absorption dehyrdration	1961	279	265	Condensate	Westcoast Transmission Co. Ltd.
Westcoast Transmission Co. Ltd.	Unit 85, Block G, NTS Map 94-J-10	All B.C. producing gas fields including Sierre and Sahtaneh north of 58° latitude	Potassium carbonate, MEA DEA absorption, dehydration	1965	27 750	22 654	.....	Westcoast Transmission Co. Ltd.
Westcoast Transmission Co. Ltd.	Unit 85, Block D, NTS Map 93-P-12	Grizzly, Sukunka, and Bullmoose	Sulfinol gas sweetening dehydration	1980	5 400	4 250		

Table P20 - Sulphur Plants, 1983

Name	Location	Material	Principal Product	Year of First Operation	Capacity Tonnes/Day
Westcoast Transmission Co. Ltd.	Taylor	Hydrogen sulphide	Sulphur	1957	465
Westcoast Transmission Co. Ltd.	Fort Nelson	Hydrogen sulphide	Sulphur	1976	675
Westcoast Transmission Co. Ltd.	Pine River	Hydrogen sulphide	Sulphur	1980	1 075

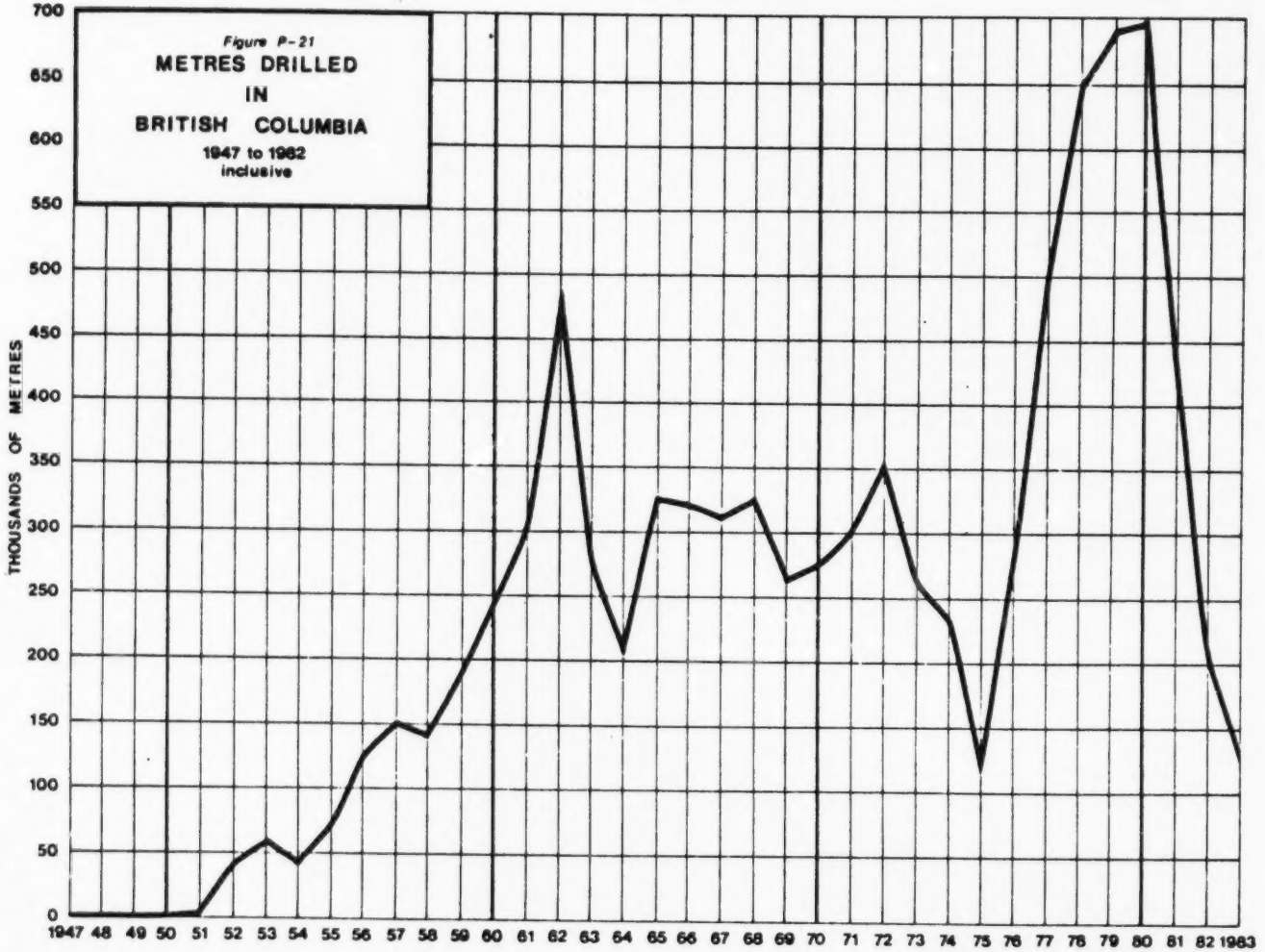
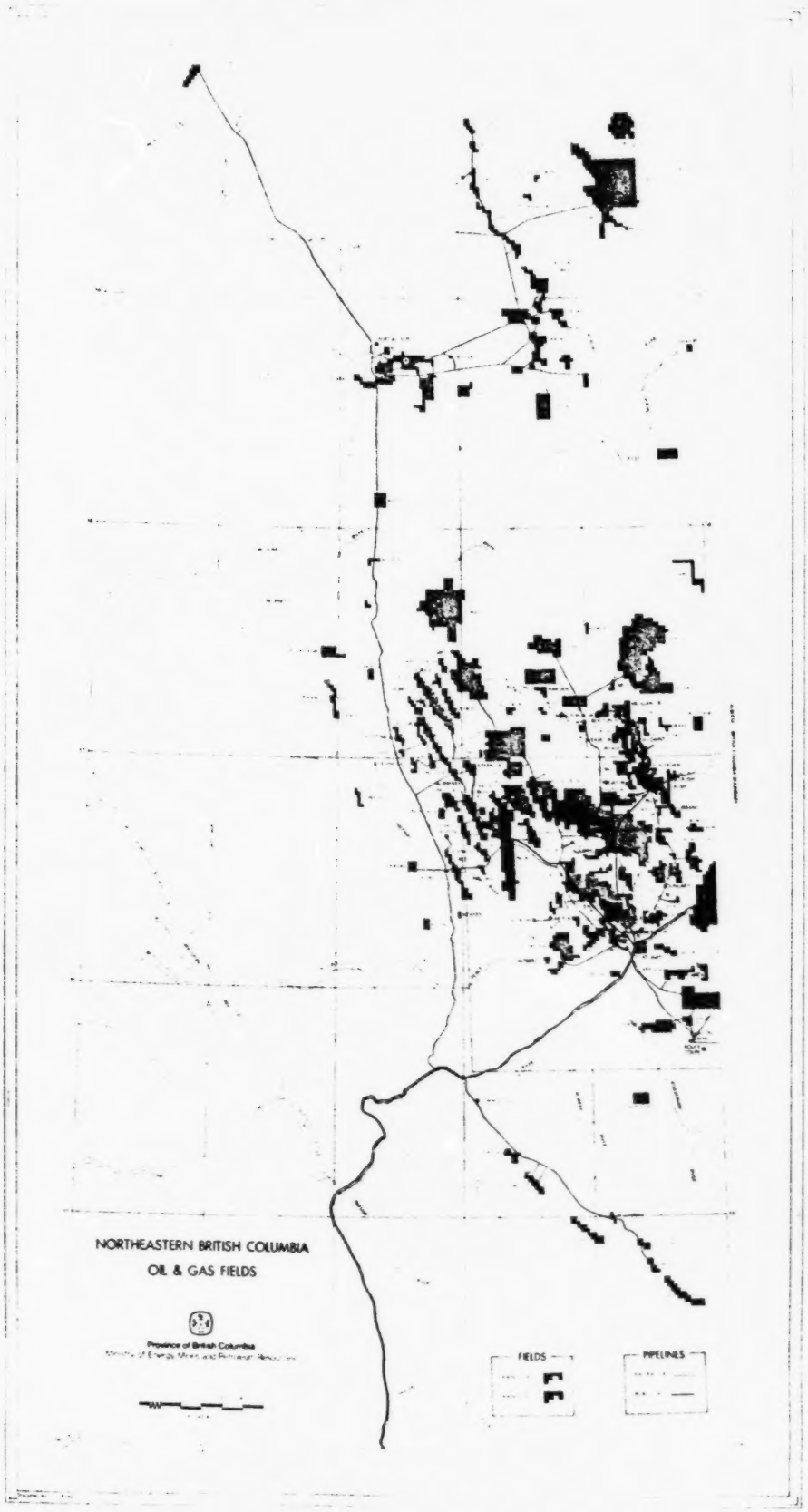


Figure P-21
METRES DRILLED
IN
BRITISH COLUMBIA
1947 to 1982
inclusive
THOUSANDS OF METRES
700
650
600
550
500
450
400
350
300
250
200
150
100
50
0
1947 48 49 50 51 52 53 54 55 56 57 58 59 60 61 62 63 64 65 66 67 68 69 70 71 72 73 74 75 76 77 78 79 80 81 82 1983



P22 Northeastern British Columbia Oil and Gas Fields

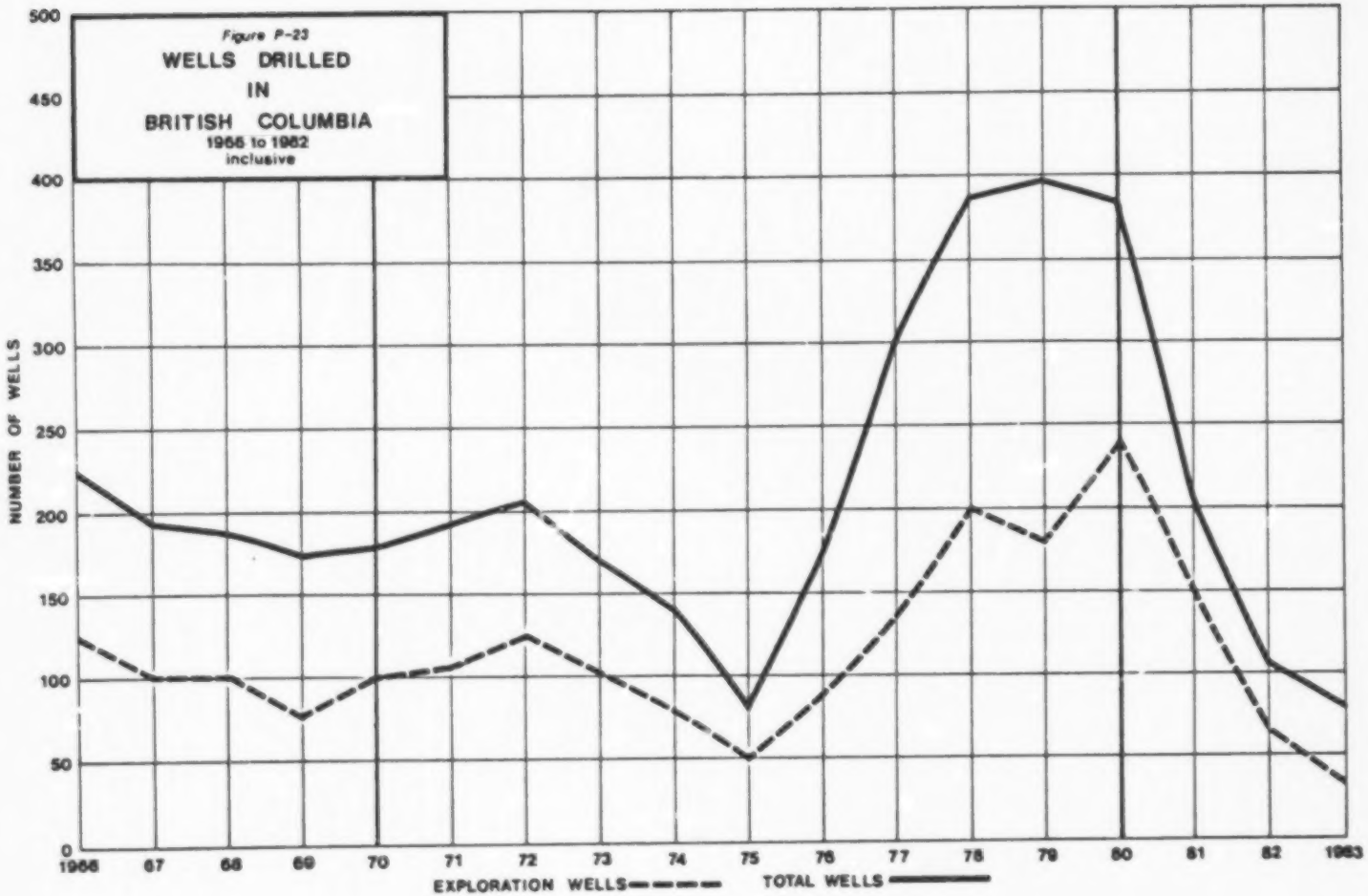


Figure P-23
WELLS DRILLED
IN
BRITISH COLUMBIA
1966 to 1982
inclusive
NUMBER OF WELLS
500
450
400
350
300
250
200
150
100
50
0
1966
67
68
69
70
71
72
73
74
75
76
77
78
79
80
81
82
1983
EXPLORATION WELLS
TOTAL WELLS

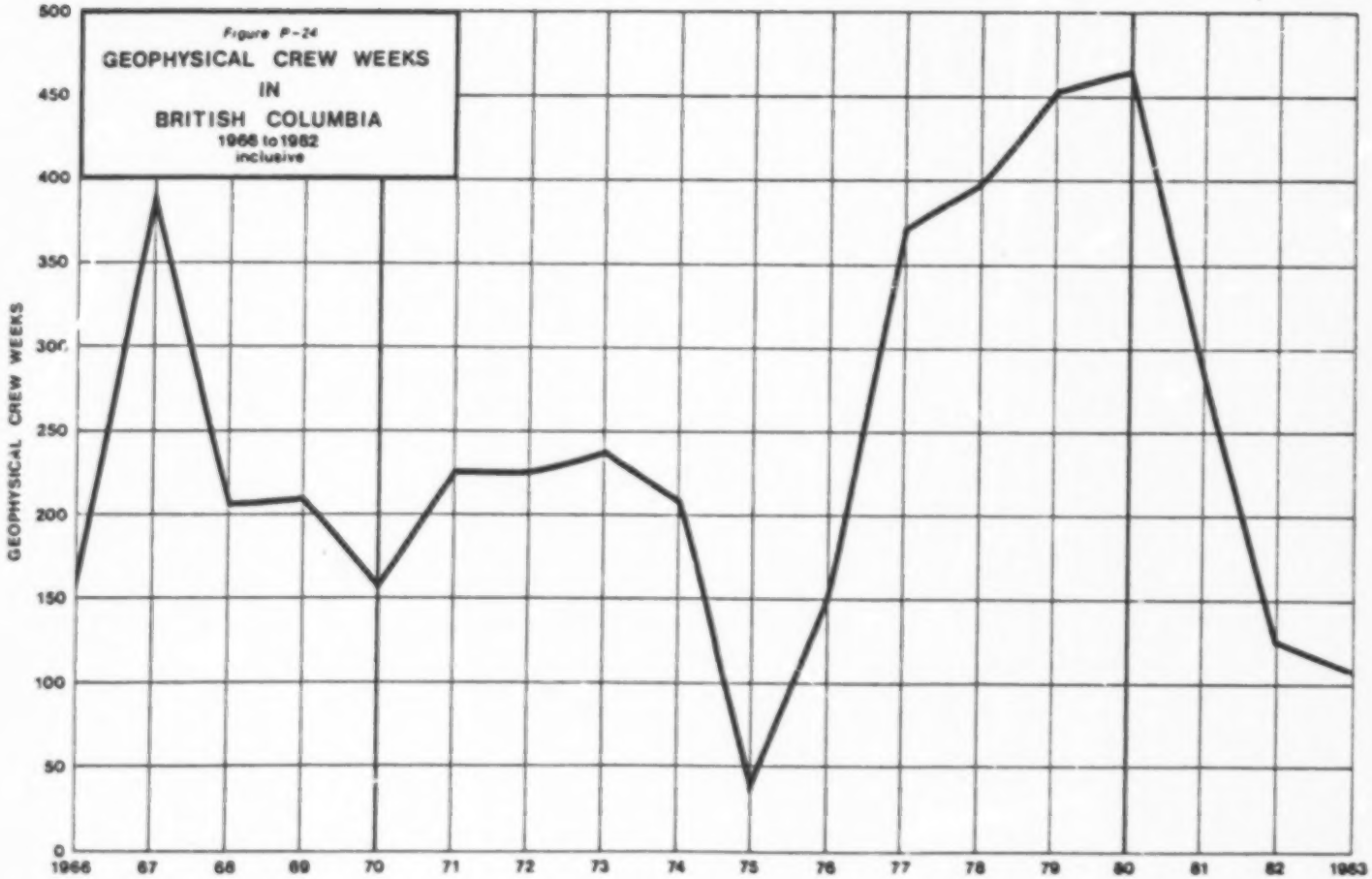
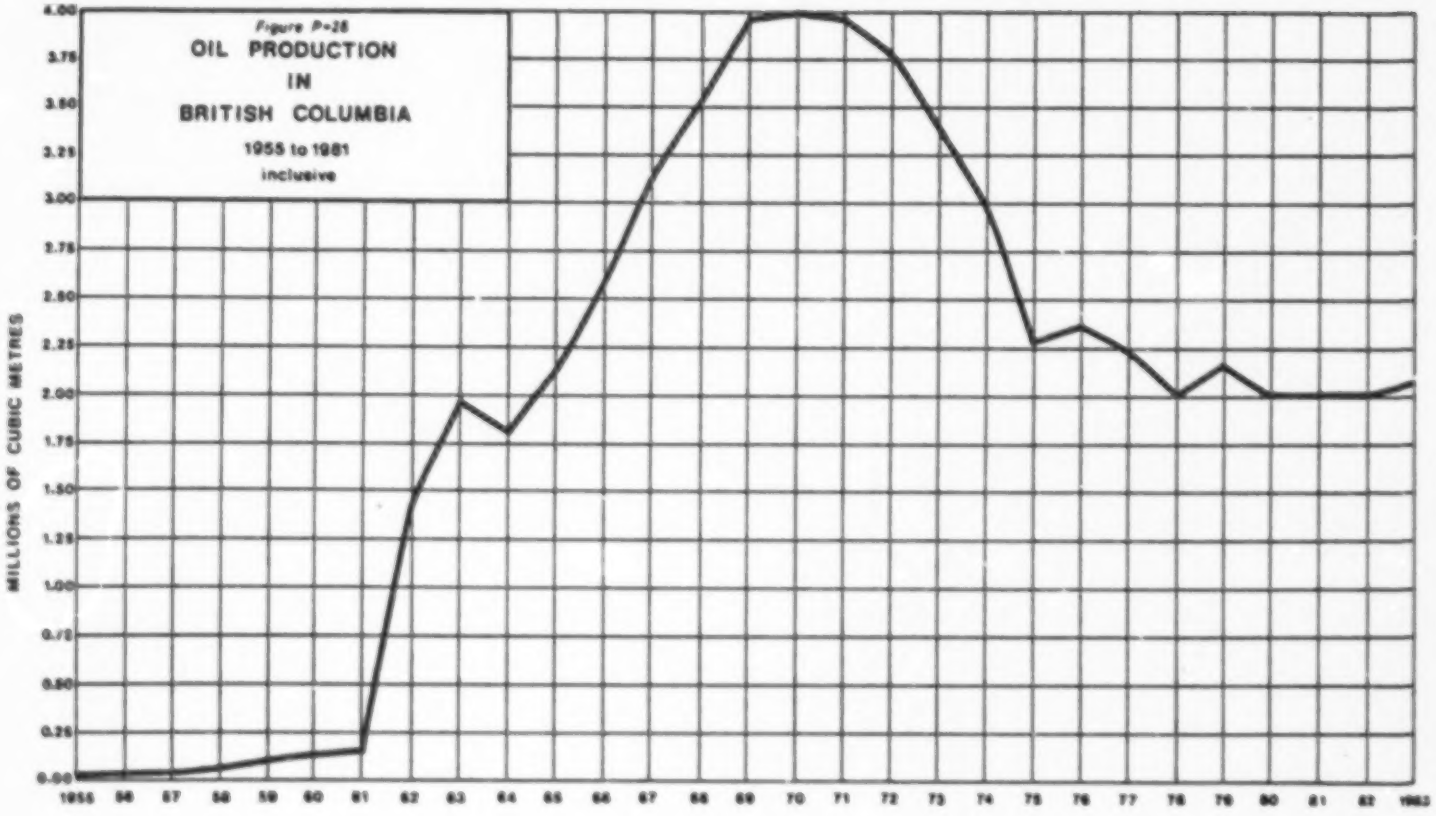


Figure P-24
GEOPHYSICAL CREW WEEKS
IN
BRITISH COLUMBIA
1966 to 1982
inclusive
GEOPHYSICAL CREW WEEKS
500
450
400
350
300
250
200
150
100
50
0
1966
67
68
69
70
71
72
73
74
75
76
77
78
79
80
81
82
1983

Figure P-28

OIL PRODUCTION IN BRITISH COLUMBIA

1955 to 1981 inclusive



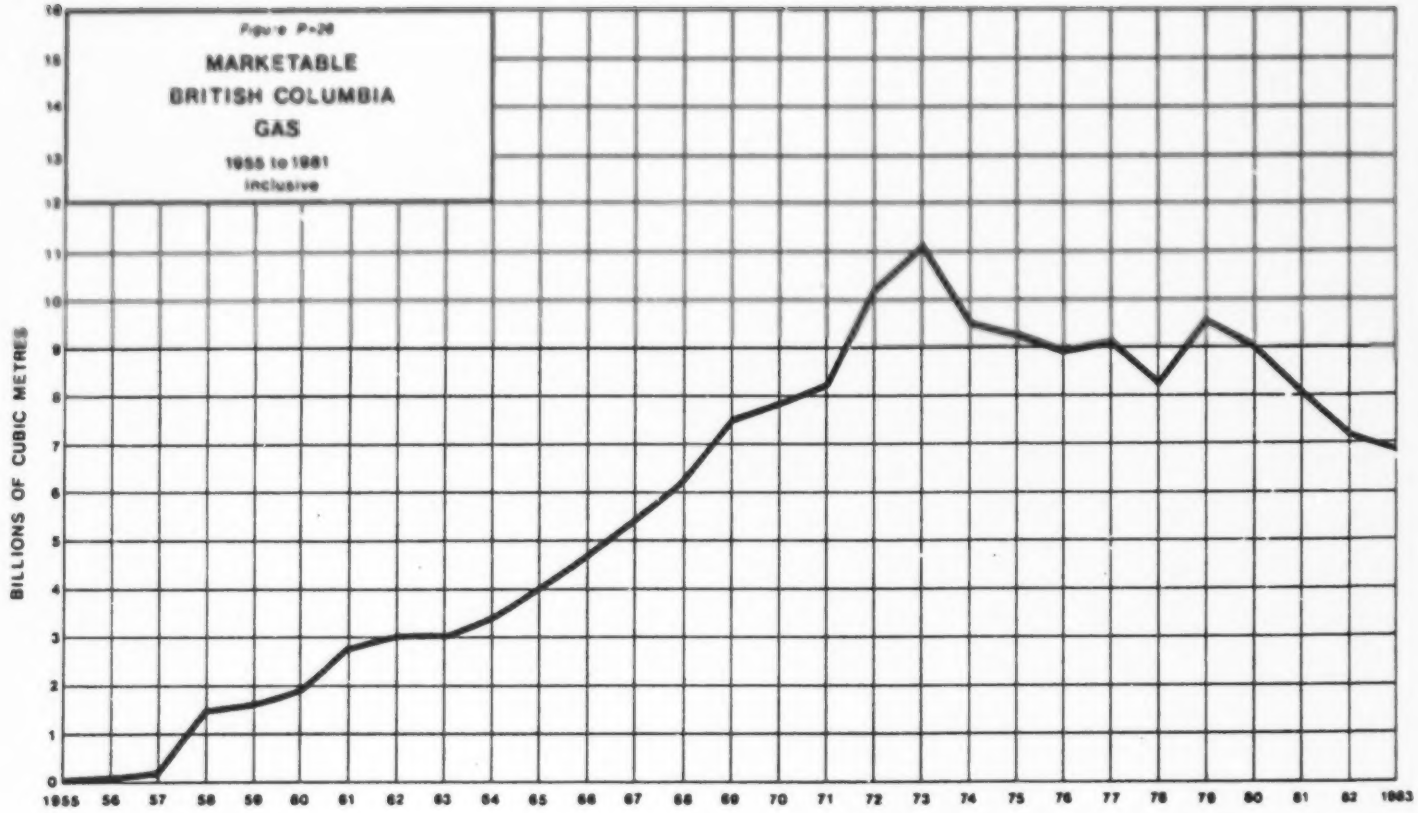


Figure P-26
MARKETABLE
BRITISH COLUMBIA
GAS
1955 to 1981
inclusive
BILLIONS OF CUBIC METRES
0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
1955
56
57
58
59
60
61
62
63
64
65
66
67
68
69
70
71
72
73
74
75
76
77
78
79
80
81
82
1983

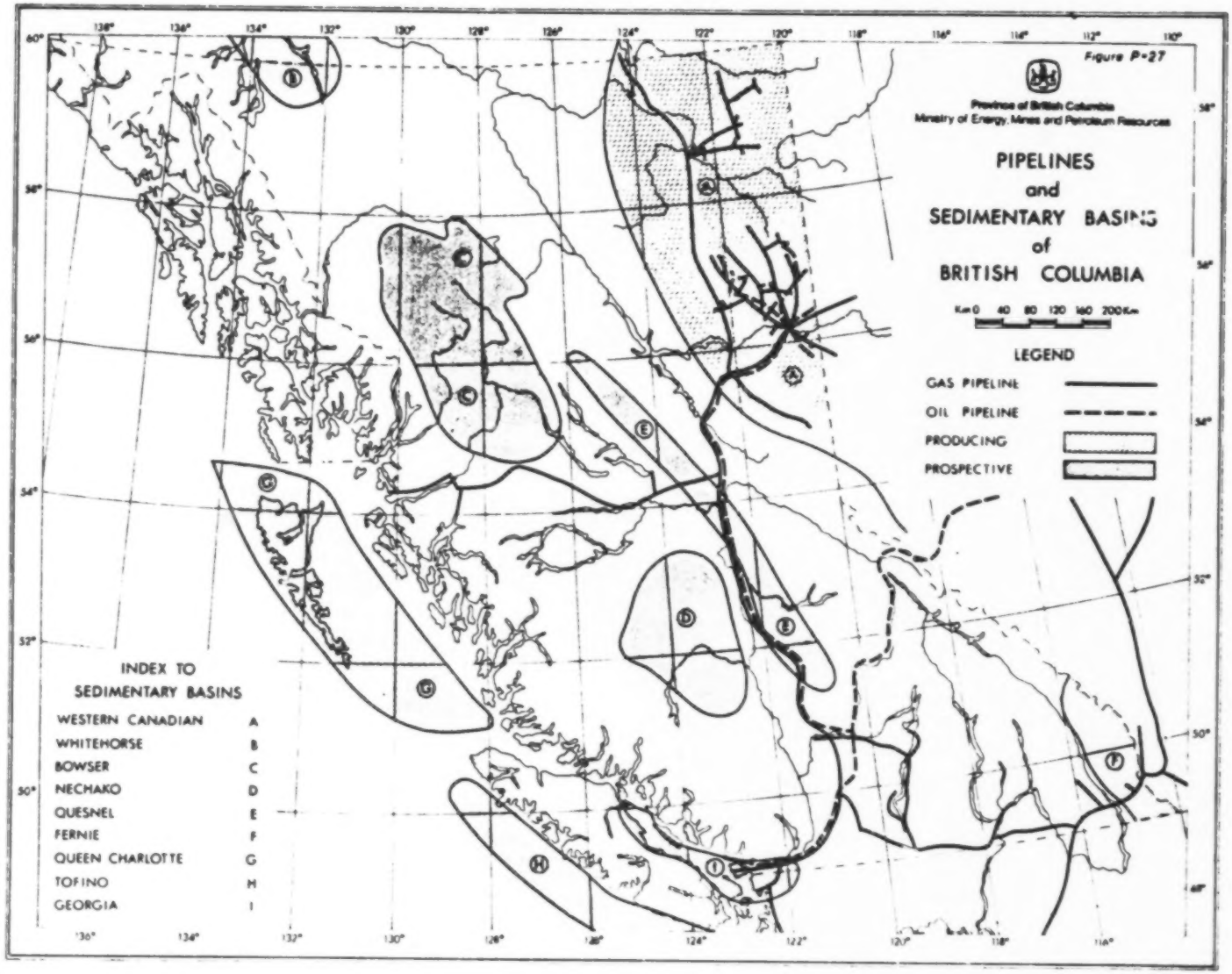
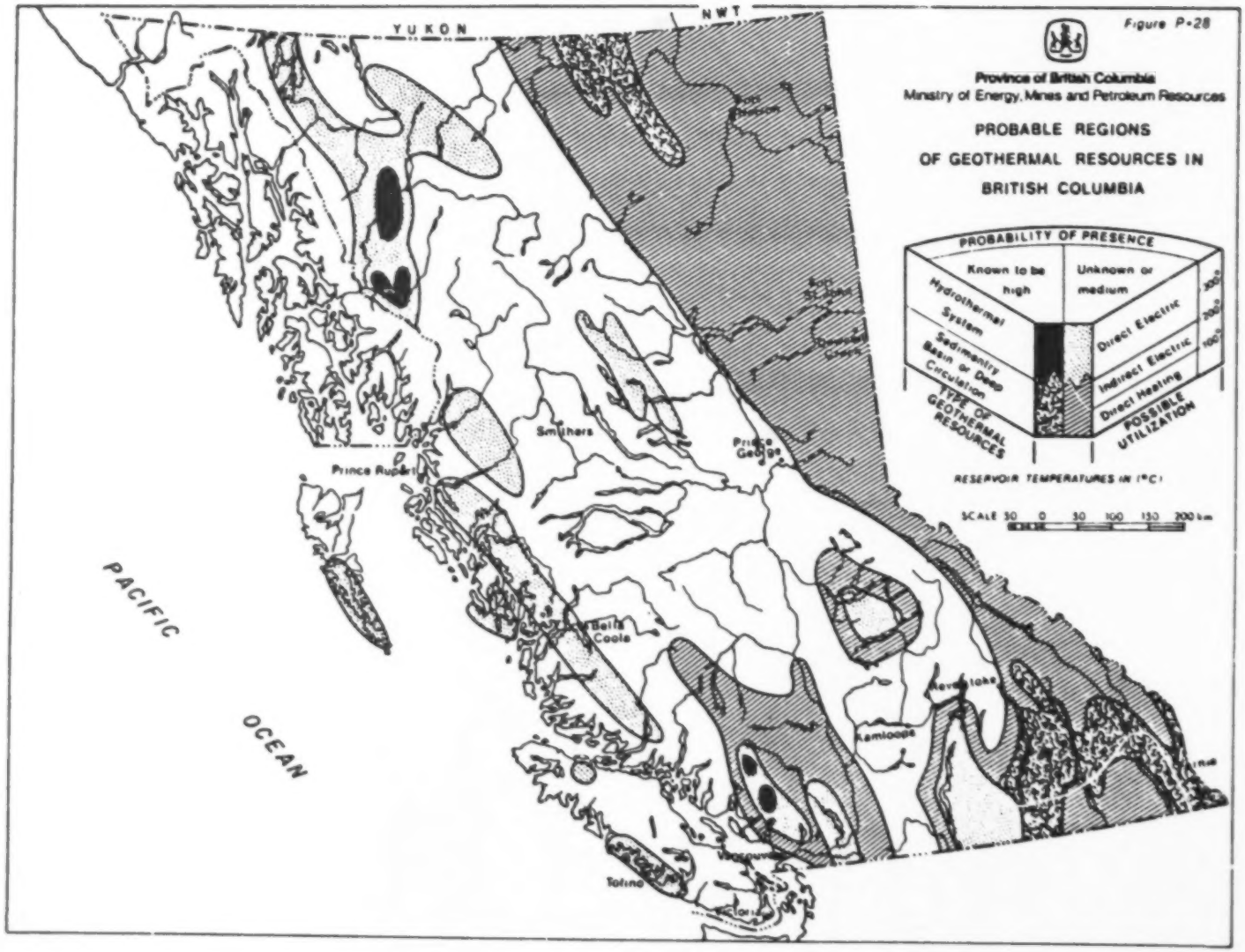


Figure P-27
Province of British Columbia
Ministry of Energy, Mines and Petroleum Resources
PIPELINES
and
SEDIMENTARY BASINS
of
BRITISH COLUMBIA
Km 0 40 80 120 160 200 Km
LEGEND
GAS PIPELINE
OIL PIPELINE
PRODUCING
PROSPECTIVE
INDEX TO
SEDIMENTARY BASINS
WESTERN CANADIAN A
WHITEHORSE B
BOWSER C
NECHAKO D
QUESNEL E
FERNIE F
QUEEN CHARLOTTE G
TOFINO H
GEORGIA I


YUKON
NWT
PACIFIC
OCEAN
Smithers
Prince George
Prince Rupert
Bella Coola
Kamloops
Tofino
Figure P-28
Province of British Columbia
Ministry of Energy, Mines and Petroleum Resources
PROBABLE REGIONS
OF GEOTHERMAL RESOURCES IN
BRITISH COLUMBIA
PROBABILITY OF PRESENCE
Known to be high
Unknown or medium
Hydrothermal System
Sedimentary Basin or Deep Circulation
TYPE OF GEOTHERMAL RESOURCES
Direct Electric
Indirect Electric
Direct Heating
POSSIBLE UTILIZATION
RESERVOIR TEMPERATURES IN (°C)
SCALE 50 0 50 100 150 200 km

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